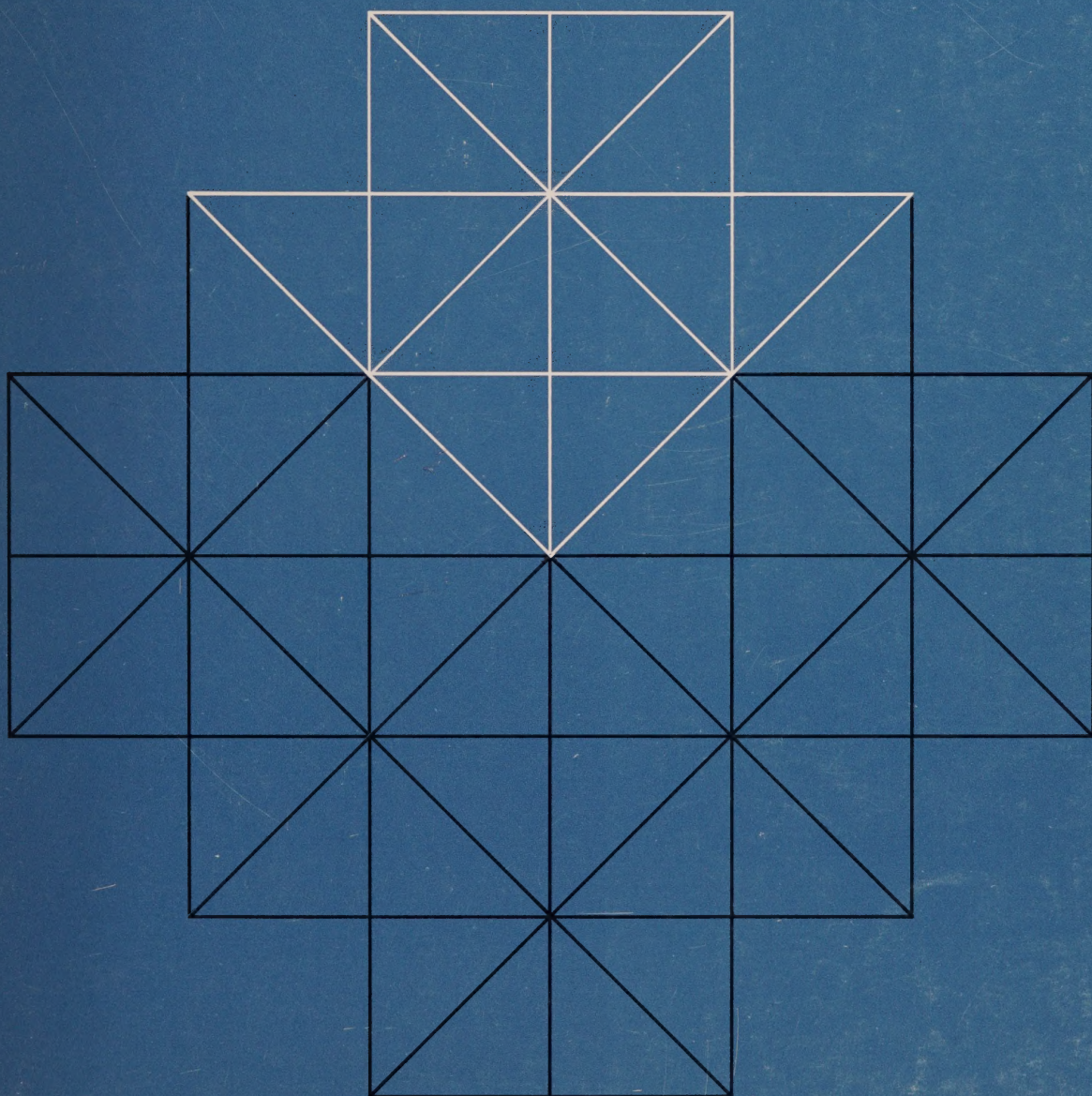


**Rush-  
Presbyterian-  
St. Luke's  
Medical Center  
Chicago**

**Rush University  
College of Health Sciences  
Bulletin  
1981-82**





# Rush University Tentative Calendar

## 1981-1982

### 1981-1982

<b>Fall Quarter</b>	Labor Day	September 7
	Orientation and Registration for New Students	September 8-9
	Classes Begin	September 10
	Classes End	November 18
	Examination Period	November 19-25
	Thanksgiving Recess	November 26-29
<b>Winter Quarter</b>	Classes Begin	November 30
	Holiday Break	December 23- January 3
	Classes Resume	January 4
	Classes End	February 24
	Examination Period	February 25- March 3
	Break	March 4-10
<b>Spring Quarter</b>	Classes Begin	March 11
	Classes End	May 26
	Examination Period	May 27-June 3
	Memorial Day—No Classes or Exams	May 31
	Commencement	June 5
<b>Summer Quarter</b>	Classes Begin	June 7
	Independence Day—No Classes	July 5
	Classes End	August 13
	Examination Period	August 16-20
	Break	August 21- September 7

### 1982-1983

<b>Fall Quarter</b>	Labor Day	September 6
	Orientation and Registration for New Students	September 7-8
	Classes Begin	September 9
	Classes End	November 17
	Examination Period	November 18-24
	Thanksgiving Recess	November 25-28
<b>Winter Quarter</b>	Classes Begin	November 29
	Holiday Break	December 22- January 2
	Classes Resume	January 3
	Classes End	February 23
	Examination Period	February 24- March 2
	Break	March 3-9
<b>Spring Quarter</b>	Classes Begin	March 10
	Classes End	May 25
	Examination Period	May 26-June 2
	Memorial Day—No Classes or Exams	May 30
	Commencement	June 4
<b>Summer Quarter</b>	Classes Begin	June 6
	Independence Day—No Classes	July 4
	Classes End	August 12
	Examination Period	August 15-19
	Break	August 22- September 2

Medical College clerkships follow a different calendar which appears in the Medical College Bulletin



1981-1982

Rush-  
Presbyterian-  
St. Luke's  
Medical  
Center  
Chicago

# Rush University College of Health Sciences Bulletin



This bulletin is published for the faculty, students, and prospective students of the College of Health Sciences of Rush University. The University reserves the right to make changes in any or all specifications contained herein and to apply such revisions to present and new students alike.

Rush University  
The College of Health Sciences  
600 South Paulina Street  
Chicago, Illinois 60612

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# Rush University Programs in the Health Professions

## 1981-1982

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### College of Health Sciences

Bachelor of Science  
Medical Technology  
Master of Science  
Clinical Nutrition  
Health Systems Management  
Audiology  
Speech-Language Pathology  
Occupational Therapy

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### The Graduate College

Doctor of Philosophy  
Anatomical Sciences  
Immunology  
Pharmacology  
Physiology

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### Rush Medical College

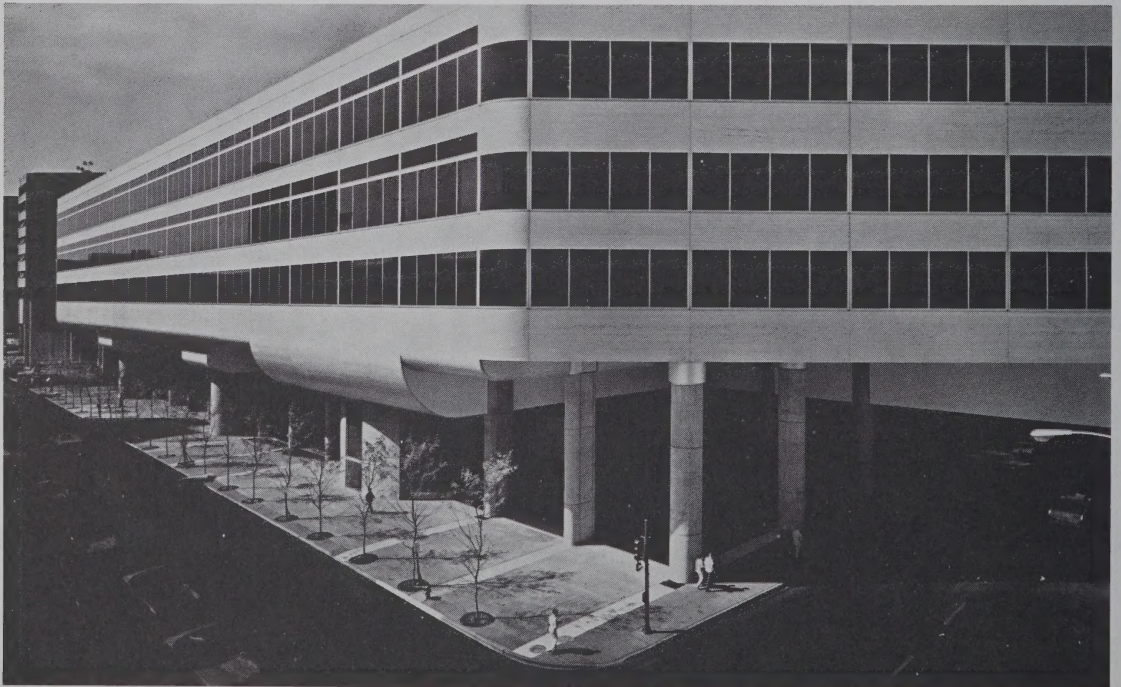
Doctor of Medicine

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### The College of Nursing

Bachelor of Science  
Master of Science  
Practitioner Programs  
Anesthesia  
Community  
Clinical Specialist Programs  
Gerontology  
Medical/Surgical  
Oncology  
Parent/Child Health  
Psychiatry  
Rehabilitation  
Doctor of Nursing Science

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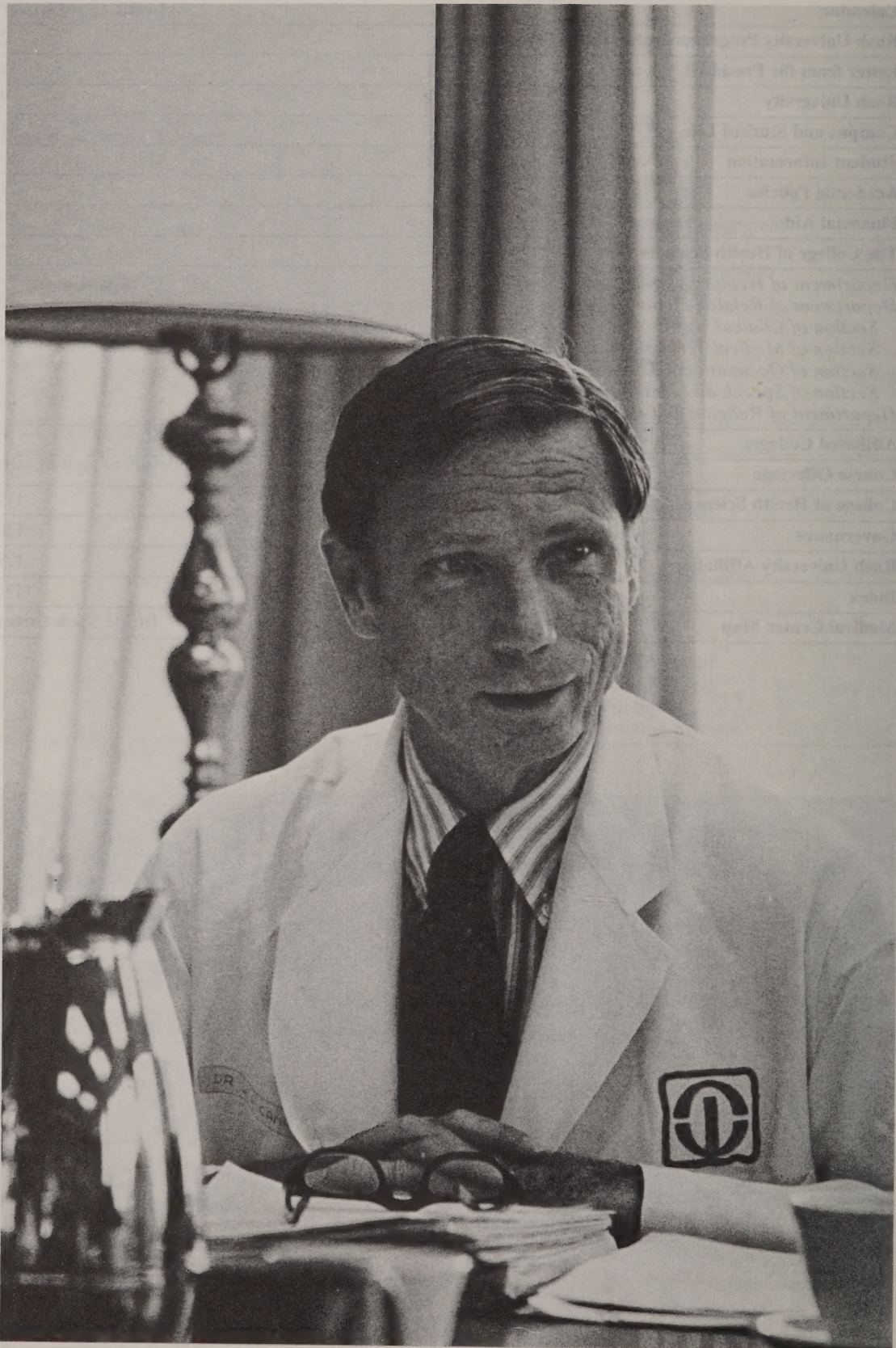
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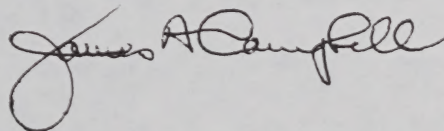
The concept of an academic health center has gained recognition throughout the United States as an important organizing principle for patient services, scientific inquiry, and health education. At Rush-Presbyterian-St. Luke's Medical Center, our approach in the development of such a center is based on a commitment to orderly and balanced growth among all the components — patient care, education, and research.

The College of Health Sciences arose out of the strengths of these components. This College and the colleges of Medicine and Nursing and The Graduate College comprise Rush University. The University, therefore, exemplifies the concept that an organized system of patient care must produce the individuals necessary to optimal provision of such care.

The College of Health Sciences, through its faculties, has a number of charges expressive of the overall goal of the Medical Center. It is largely responsible for developing and maintaining a level of excellence in furthering investigation of the increasingly

complex problems related to the understanding of health and the health delivery system. It is responsible for the education of students in those professional scientific areas needed to support the most effective approaches to health care. In all of its programs, the College appropriately is committed to the belief that professionals, in areas of health care in addition to medicine and nursing, are an integral part of the health care endeavor.

To those of you who will enter the College as students, I extend the welcome of our Medical Center and University and the invitation to share our objectives. Your responsibility is to grow. Our responsibility is to nurture your growth in every way we can.

A handwritten signature in dark ink, reading "James A. Campbell". The signature is fluid and cursive, with the first name "James" and last name "Campbell" clearly legible.

James A. Campbell, M.D.  
President





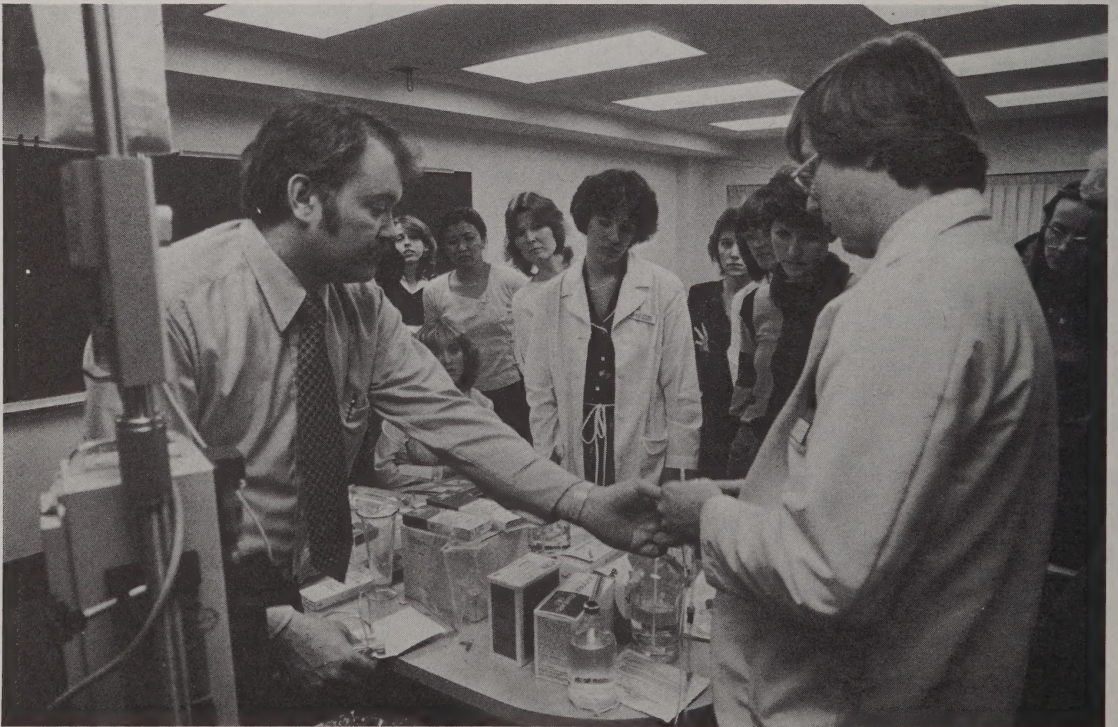
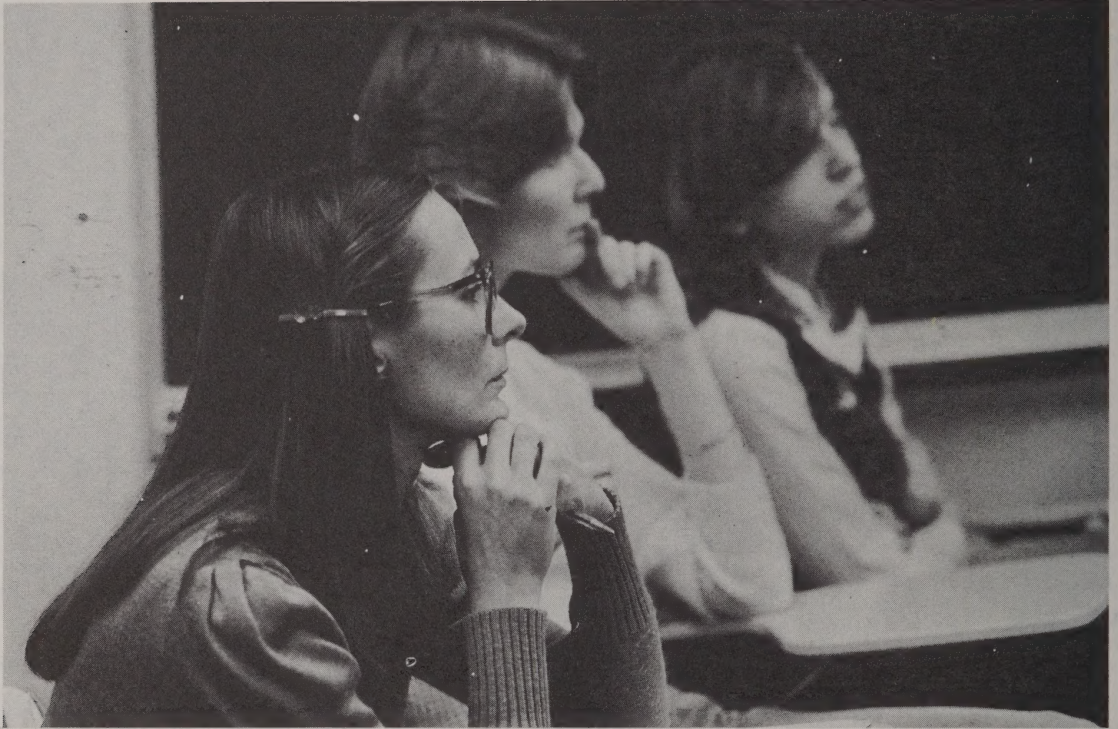


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# The University

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# The University

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The establishment of Rush University in 1972 by the trustees of Rush-Presbyterian-St. Luke's Medical Center represents a combined heritage that stretches back to 1837. On March 2 of that year, the Illinois State Legislature chartered Rush Medical College — two days before the city of Chicago was incorporated.

The Rush Medical College tradition began with Dr. Daniel Brainard, the founder, and Dr. Benjamin Rush, a signer of the Declaration of Independence and the physician for whom the college was named. Dr. Brainard was a distinguished surgeon and scientific investigator who led Rush Medical College to exert strong influence on medical practice and scientific research. Two years after the establishment of the medical college, Dr. James Van Zandt Blaney, a member of the faculty, opened the first free medical dispensary west of the Allegheny Mountains. It became known as the Central Free Dispensary in 1873. In 1864, St. Luke's Hospital was founded, and, in 1883, Presbyterian Hospital. All three institutions merged in 1956 to form Presbyterian-St. Luke's Hospital and Health Center. In 1969, Rush Medical College merged with the Hospital to create Rush-Presbyterian-St. Luke's Medical Center.

In 1885, the first antecedent of the College of Nursing, the St. Luke's Hospital Training School of Nurses, opened its doors to offer diploma education in nursing. In 1903, the Presbyterian Hospital School of Nursing accepted its first students and from 1956 until 1968, nurses were taught at the merged Presbyterian-St. Luke's Hospital School of Nursing. Before the establishment of the College of Nursing in 1973, a total of 7,221 nurses had graduated from these three schools. Many made outstanding contributions to the field of nursing.

Forebears of the College of Health Sciences can be traced to early members of the Rush Medical College faculty whose scientific inquiries led to numerous advances in the field of medicine. From 1959 to 1973, Presbyterian-St. Luke's Hospital sponsored a school of medical technology which was the second largest program of its kind in the

city of Chicago. During this time, the one-year professional internship program for students completing requirements for the Bachelor of Science degree in medical technology certified over 200 students. Today the College of Health Sciences includes the Department of Related Health Programs, the Department of Religion and Health and the Department of Health Systems Management. The Graduate School, formerly positioned within the College of Health Sciences, was established as a free-standing Graduate College in 1981.

The mission of the College of Health Sciences is to exercise responsibility for the education and training of undergraduate and graduate students. In its educational programs, the College is particularly committed to the concept that scientists and professionals in areas of health care other than medicine and nursing are an integral part of the health care endeavor. Their education, therefore, is seen as central to the growth of a more successful system of health care delivery.

Today, Rush University continues to build upon its tradition of commitment to the education of future health care practitioners and to the establishment of a rational system for the delivery of care to all segments of the population. The University is fully accredited by the North Central Association of Colleges and Schools to offer programs leading to the baccalaureate, master's, and doctoral degrees. As an integral element of Rush-Presbyterian-St. Luke's Medical Center, Rush University is part of a cooperative health care delivery system that serves approximately 1.5 million people through its own resources and those of affiliated health care and academic institutions. At the Medical Center, more than \$9 million is budgeted each year to carry out basic research and clinical investigation in traditional disciplines and in multidisciplinary areas, as well as in nursing and related health.

The Rush academic tradition bases the learning environment in the health care system. Rush-Presbyterian-St. Luke's Medical Center and its affiliated hospitals are the primary classrooms of Rush University.







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# Campus and Student Life

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## The Campus

The College of Health Sciences, the College of Nursing, The Graduate College and Rush Medical College are located on the campus of Rush University at Rush-Presbyterian-St. Luke's Medical Center on Chicago's near west side. The Medical Center includes: Presbyterian-St. Luke's Hospital; the Marshall Field IV building, an outpatient mental health facility; research buildings where more than \$9 million is budgeted each year to carry out basic scientific and clinical investigations; academic facilities for Rush Medical College, the College of Nursing, the College of Health Sciences and The Graduate College; a professional office building; student apartment buildings; the Laurance Armour Day School for children of employees and students; and the Johnston R. Bowman Health Center for the Elderly. Sheridan Road Hospital on Chicago's north side is operated as an integral part of the Medical Center.

In September, 1976, the new Rush-Presbyterian-St. Luke's Medical Center Academic Facility was dedicated. The structure is the hub of activity of Rush University and accommodates large class activities, small group seminars, and individual instruction. It has direct internal access to the Professional Building and patient care and research facilities. Involvement of students with faculty and staff at these adjacent facilities is an integral element of the academic programs at Rush.

The new building includes a large multidisciplinary laboratory surrounded by 10 unit laboratories. Each unit houses 16 student stations for basic science studies. A separate gross anatomy laboratory is designed on the same modular concept. A central demonstration area and model room is accessible from

four dissecting modules, each with six tables. Two 150-seat lecture halls are designed to utilize all types of media presentations and live demonstrations. The Center of Educational Resources supports all instructional activities for faculty and students, including the library, the Learning Resource Center, Computer Based Education, Biomedical Communications, animal resource facilities, curriculum development and evaluation, Student Learning Skills Center and the University Office of Continuing Education. The University Bookstore is located on the first floor and the Medical Center Cafeteria is on the second floor.

The Library of Rush University, the oldest medical library in the city of Chicago, serves the entire University campus and is located in the new Academic Facility. It is administered by a staff of professional medical librarians. The library has approximately 70,000 volumes, subscribes to 1,750 periodical titles, borrows documents from inter-library loan, and processes MEDLARS, MEDLINES, and AV-LINE requests for patrons. New monograph and reference books are acquired at a rate of over 2,000 each year. The library also has an outstanding collection of rare medical books available for research and study.

Schweppe-Sprague Hall houses lecture rooms, office space, student dormitory rooms, and a student recreation room. Student support offices are on the first floor. The student counseling center is located on the eighth floor. The services of the Registrar of Rush University and the Offices of Student Financial Affairs, Student Affairs, Financial Aid and the Counseling Center are available to all University students.

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## Clinical Experience

Students of Rush University receive their clinical training primarily at Presbyterian-St. Luke's Hospital, a voluntary, not-for-profit hospital with a professional staff of about 680 physicians and scientists, 1,200 nurses, and 400 house staff who receive graduate medical education in over 30 specialty areas. Stu-

dents also spend clinical time at other agencies and institutions in the Chicago area. Each year more than 29,000 patients are admitted to the hospital, which has 873 beds and 40 bassinets. The Johnston R. Bowman Health Center for the Elderly has 175 beds and Sheridan Road Hospital, 139. By



tradition each patient participates in the teaching programs of Rush University. Presbyterian-St. Luke's Hospital is directly across the street from Schweppe-Sprague Hall.

In clinical settings, some health science students are required to wear white laboratory coats.

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### Affiliated Hospitals

Affiliated hospitals and a community health center are cooperating with Rush-Presbyterian-St. Luke's Medical Center to provide students and house staff with opportunities to participate in the delivery of health care in a variety of socioeconomic settings in urban and rural areas.

Participating institutions are:

Bethany Hospital, Chicago:	160 beds
Central DuPage Hospital, Winfield:	364 beds
Christ Hospital, Oak Lawn:	855 beds
Community Memorial General Hospital, LaGrange:	276 beds
Copley Memorial Hospital, Aurora:	320 beds
Galesburg Cottage Hospital, Galesburg:	265 beds

Grant Hospital of Chicago, Chicago:	508 beds
Mile Square Health Center, Chicago:	more than 38,000 patients registered
Mount Sinai Hospital Medical Center, Chicago:	466 beds
St. Mary's Hospital, Streator:	248 beds
Schwab Rehabilitation Hospital, Chicago:	67 beds
Skokie Valley Community Hospital, Skokie:	271 beds
Swedish Covenant Hospital, Chicago:	329 beds
West Suburban Hospital, Oak Park:	374 beds

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### Housing

Chicago and its adjoining suburbs, as well as the University, provide a wide variety of off-campus and on-campus housing options for Rush University students. The Office of Student Affairs publishes informational brochures which outline these residential opportunities.

Information regarding on-campus housing is sent to each applicant. Off-campus housing information may also be obtained by contacting the Office of Student Affairs.

Schweppe-Sprague Hall, Kidston House and McCormick House comprise the on-campus housing at Rush University. The individual units range from a limited number of single-occupancy dormitory spaces to two-bedroom apartments which accommodate up to four students. When filled to capacity, current on-campus facilities can house approximately 25 percent of the total student body.

Because of the great demand and limited number of available on-campus accommodations, students willing to accept a roommate arrangement will enhance their chances of receiving an on-campus assignment.

Nine-month or twelve-month rental agreements are available for on-campus housing. A lease will accompany each letter of acceptance into University housing. The lease, accompanied by a security deposit of one month's rent, must be signed and returned to the Office of Student Affairs within the time specified in the cover letter and lease. Failure to return the lease and the security deposit within the time specified will result in the loss of the housing assignment.

Information regarding current availability of off-campus units, potential roommates and car pools is also coordinated by the Office of Student Affairs. The office maintains an off-campus housing bulletin board as well as current copies of local newspapers to help students relocate. All housing inquiries should be directed to:

Office of Student Affairs  
Rush University  
1743 W. Harrison Street  
Chicago, Illinois 60612  
(312) 942-6302



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## Transportation

Public transportation to and from the Rush campus is readily available. The "Congress A" train from downtown Chicago and the western suburbs stops two and one-half blocks northwest of the campus at the "Medical Center" stop. The "Douglas B" train from downtown, stops at "Polk Street" at the southeast corner of the campus. Chicago Transit Authority buses also stop

at the campus.

Rush students who commute by automobile may use the covered garage located directly across the street from the Academic Facility on Paulina Street. Prevailing parking rates apply.

The Medical Center also operates a shuttle bus to and from the Chicago Northwestern and Union train stations during rush hours.

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## Health Services

The University has authorized a two-part program of medical service to protect and promote the health of its students. One is ANCHOR, a health maintenance organization oriented toward illness prevention, which provides a variety of professional services and ambulatory care.

While a student is actively enrolled, single coverage in ANCHOR is provided at no charge. However, coverage does not begin until an ANCHOR application is properly filled out and signed at the Office of Financial Affairs. A new application must be filled out during the first week of the quarter *for every new student* and whenever a student is rejoining the ANCHOR program after a lapse in coverage such as summer vacation.

In addition, students are required to stop by the Office of Financial Affairs prior to the end of spring quarter and indicate if they want continued summer coverage or not. If summer coverage is desired, they will be required to pay the appropriate fee at that time.

A student's spouse and dependents may also be enrolled in the ANCHOR program for an additional fee. This can be done by filling out a change-in-coverage card for family or couple coverage when the student first becomes married or has a child or at open enrollment during the first week of each quarter.

*Costs for 1981-82 participation are:  
(Per Quarter)*

ANCHOR	While enrolled	Not enrolled
Single	—0—	\$ 56
Couple	\$ 56	\$112
Family	\$130	\$186

The second portion of the medical service program is a group Blue Cross *Hospitalization* policy. From the date of matriculation until graduation (including summer quarters), all students must maintain either their own separate hospitalization policy or subscribe to Rush's group policy. Accordingly, all students must decide *prior to actual matriculation* whether or not to join Rush's policy. If a student is already covered elsewhere or intends to seek coverage elsewhere, proof of such coverage will be required during fall registration. Such proof must be brought to registration and would consist of a current hospitalization policy or a member identification card. In addition, it is the student's responsibility to notify the Office of Financial Affairs *immediately* of any changes that could result in a lapse of hospitalization coverage. An example of such an occurrence would be when a student attains a certain age at which point family coverage will no longer apply. Prior to any such lapse in coverage, the student must decide to either join Rush's policy or seek other alternative coverage. It is the students' responsibility and is in their best interest that no such lapses in hospitalization coverage occur.

In addition, a student's spouse and dependents may also be enrolled in Rush's Blue Cross plan for an additional fee. This can be done by filling out a change-of-coverage form for family coverage when the student first becomes married or during open enrollment which is the first week of each quarter. A child is covered under the family plan at no additional charge; however, the child's name must be added to the family policy before the coverage is effective. This can be done by



filling out a change-of-coverage form at the Office of Financial Affairs.

If a student wishes to drop Blue Cross coverage during the school year, he/she must provide proof of hospitalization coverage elsewhere.

*Costs of 1980-81 participation were:*

BLUE CROSS	Per Quarter	Summer Plan
Single	\$ 33	\$ 33
Family	\$151	\$151

Students not enrolled in the University are ineligible for the University's health insurance coverage.

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### Counseling Services

The Student Counseling Center is a place to discuss study and learning difficulties, marital and relationship stresses, and any other matters which may be hindering growth and development. At the Center, students with a range of emotional and social adjustment problems may obtain help from mental health professionals. In addition to individual and couple counseling, the Center offers group and workshop experiences. Concerns common to many students often can be addressed effectively by small group dis-

cussions. Also, the Center trains student volunteers as peer counselors. Members of the peer counseling group are available for students who prefer to confer with another student rather than with a professional.

The Student Counseling Center maintains strict standards of privacy and confidentiality. No information on individual students is released to anyone, inside or outside the University, without the informed consent of the student, nor do student contacts with the Center become a part of University records.

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### Social and Cultural Activities

The more than 1,000 students currently enrolled at Rush University enjoy a variety of co-curricular activities. The Office of Student Affairs works with students to sponsor organized programs of a cultural, educational, recreational, and social nature.

The University Programming Board is an elected group of students from all four colleges who work with the Office of Student Affairs to plan and implement co-curricular programs. Programs include: College bowl tournaments, films, ski trips, student dances and University nights at local cultural events.

Chicago's Loop area, with its many opportunities to enjoy art, music, drama, films, and museums, is located approximately two miles from campus. It is easily reached by car or public transportation. Outstanding attractions in Chicago include the Chicago Symphony Orchestra, the Lyric Opera, the

Art Institute, the Museum of Science and Industry, the Field Museum of Natural History, the Shedd Aquarium, and the Adler Planetarium.

Lake Michigan provides an ideal site for a variety of activities such as swimming, boating, fishing, bicycling along the lakeshore path, and sunning. During the winter months, ice skating and cross-country ski enthusiasts have access to Chicago's expansive parks.

Rush University students may use the physical education facilities at the University of Illinois Chicago Circle Campus for a nominal fee. Students must present their Rush University I.D. cards to be able to take advantage of the special student rate. Information regarding the fee structure and scheduling is available in the Office of Student Affairs.

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### Career Opportunities

Rush provides students with information concerning job opportunities through the Office of Student Affairs. Information is available on summer job opportunities, particularly between the junior and senior year of the undergraduate program. A number of

career fairs are also held to acquaint students with job opportunities available at health care agencies after completion of their programs. In addition, students can establish permanent placement files with the Office of Student Affairs.



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### **International Students**

Rush University welcomes students from other countries and every effort is made to help the foreign student adapt to life in the United States.

The Test of English as a Foreign Language (T.O.E.F.L.) must be submitted if English is not the applicant's native language. Any evidence in support of the application must have an authorized English translation.

Graduate applicants from other countries must successfully complete the proficiency

examinations of the College of Health Sciences to determine skills and knowledge in subject matter.

Rush University is authorized under Federal law to enroll non-immigrant international students. Form I-20 will be issued at the request of the student after an offer of admission is made. International students must provide proof of ability to finance their entire education before the form will be issued.

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### **Equal Opportunity**

Rush University encourages and gives full consideration to all applicants for admission and financial aid regardless of race, sex, religion, color, national origin, age, or handicap. The University is committed to attracting candidates who will help to make the popula-

tion of health care professionals more representative of the national population. Ms. Beverly B. Huckman, Equal Opportunity Coordinator for Academic Affairs, has been designated as the University's coordinator for the implementation of these policies.









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# Student Information

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## Credit

**Credit Hours.** The quarter hour is the unit used by the College of Health Sciences for determining credit for courses taken at Rush University. One quarter hour generally represents a lecture or seminar meeting one hour each week, or a laboratory or clinical experience of two or three hours per week (sometimes more) for the ten weeks of the quarter. An examination for each course

generally is given during the 11th week.

Full-time students will carry a course load of 12 to 17 hours each quarter.

Outstanding students may petition the dean to register for additional courses. Written approval is required. Degree candidates must also obtain permission for less than full-time course work.

---

## Part-Time Study

Undergraduate students must plan on full-time course work. Graduate study in Health Systems Management is offered full time only.

Other graduate students may be admitted for courses on a part-time basis. However, all prerequisites for a specific course must be met before enrollment. Part-time graduate students must complete degree requirements

within 36 months. The program director has the discretion to make special arrangements in the above cases.

Graduate students admitted on a part-time basis may be able to switch to full-time study depending upon availability of courses and approval of their program director.

---

## Absences

Students are fully responsible for all material presented in class sessions. Students are expected to attend all seminar and clinical practice periods, and are fully responsible for all content presented therein. When illness or other special circumstances prevent attendance, the student must inform the

instructor in advance, when possible, in order to plan for meeting objectives on an individual basis. Students absent from a final examination will receive a zero for that examination or an incomplete for the course as determined by the course director.

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## Examinations

The examination policy is the responsibility of the individual course director, who will inform students of examination requirements for that particular course. A period at the end

of the quarter is provided for final examinations. This period may be used as the course director chooses.

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## Transfer of Credit

Undergraduate courses taken at an accredited college or university that fulfill the pre-health curriculum requirements may be applied toward the baccalaureate degree in medical technology at Rush. Elective credit may be fulfilled by upper division courses taken at another institution.

After matriculation, students who take an elective course off-campus must complete a Transfer Credit Approval form before credit will be applied toward the baccalaureate degree. Students seeking exemption from a required Rush University course must also

complete this form which is available in the Registrar's Office.

Graduate level courses taken at a recognized college or university may be applied to the Master of Science degree at Rush, subject to the approval of the program director. Credit in excess of nine quarter hours requires approval of the dean.

Concurrent enrollment at another institution must be approved by the dean. A Transfer Credit Approval form must be submitted to the dean within 30 days prior to commencement of the concurrent study.



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## Registration

Registration for a new term is normally completed in an announced pre-registration period during the preceding term. Students must be registered and in attendance no later than Monday of the second week of each quarter or they will be dropped from the class roster. Registration, dropping and adding courses, and withdrawal from school must be done by completing forms provided by the Office of the Registrar.

Registration is complete only after tuition and fees have been paid in full or deferred payment contracts have been signed with the Office of Financial Affairs. Students may attend classes only after they have completed registration. Students registered in

a course but failing to participate will receive "F" grades.

*Identification Cards.* Each student receives an identification card at matriculation. Each term the card is validated at the completion of registration. A valid card is needed for identification within the Medical Center complex, for use of the library, and for admission to some events.

*Independent Study.* With written permission from the program director, a student may pursue an independent reading or independent clinical study. A preceptor works with the student in designing, monitoring, and assessing the course work.

---

## Adding or Dropping a Course

After the registration form has been accepted by the Office of the Registrar, students may add or drop courses by completing a form provided by that office. The student's advisor must sign these forms before they will be accepted. Monday of the second week of the quarter is the last day to add a course.

The official date of withdrawal from a course is determined by the date the completed form is returned to the Office of the

Registrar. If a student withdraws by the end of the first week of classes, the course will not appear on the academic record. A "W" grade will appear on the record if the withdrawal occurs between the beginning of second week and midterm. After midterm a "WP" or "WF" grade will be recorded depending on whether the course director considered the student to be doing passing or failing work at the time of withdrawal.

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## Leave of Absence

A health science student who must interrupt his or her studies for reasons such as sustained ill health or compelling personal situations may apply for a leave of absence for a stated period of time, usually not to exceed one year. Leave of absence requests must be submitted in writing to the department chairman or his designate. If approved by

him and by the dean, the student must satisfy the conditions of the leave before reentering and must comply with all policies, requirements, and course sequence in effect at the time of reentry. The student will pay tuition and fees at the rates in effect at the time of reenrollment.



---

### Withdrawal from School

Students planning to withdraw from school voluntarily must complete a form available in the Office of the Registrar. The student will obtain appropriate signatures while returning all Medical Center materials, the identifica-

tion card, and name pin. Withdrawal is final once all Medical Center bills have been paid and the completed form is submitted to the Office of the Registrar.







# Academic Policies

## Admissions

Admissions policies vary with each program. These policies are listed under the individual program sections elsewhere in this bulletin.

## Grades

*Transcripts and Grade Reports.* Grades are recorded on the student's permanent academic record in the Office of the Registrar. A transcript of the academic record is official with the signature of the registrar and the corporate seal of Rush-Presbyterian-St. Luke's Medical Center.

Official transcripts are released only by written request. Forms for this purpose are available in the Office of the Registrar for on-campus students. There is no fee for this service.

Transcripts will not be released until the student has paid all bills due the Medical Center.

Quarterly grade report forms are sent to the student's local address as soon as grades are recorded each term. This is a student copy only and it should not be accepted by any institution or agency in lieu of an official transcript.

## Grade Point Average

Each student maintains a grade point average for all work completed at Rush using the grading system described here. The grade point average is determined by dividing the number of points received by the number of credit hours attempted in which A, B, C, D, or F grades were received. This computed grade point average is not affected by courses taken on P/N basis or by courses transferred from another institution. These courses are added to the credit hour total only.

*Grading System.* The following grades are used to report the quality of work at Rush:

Grade	Quality	Grade Points
A	Excellent	4
B	Good	3
C	Satisfactory for undergraduate but below the level expected of a graduate student	2
D	Minimal passing	1
F	Failure	0
P	Passing	—
N	Not passing	—
I	Incomplete work	—
W	Withdrawal prior to midterm of the quarter	—

WP	Withdrawal after midterm—quality of work was passing at the time of withdrawal	—
WF	Withdrawal after midterm—quality of work was failing at the time of withdrawal	—

*Undergraduate Student Grades.* A grade of "P" or "N" is given for elective courses at the discretion of the instructor and in some cases when the student petitions, not later than the first week, to take the course on a P/N basis with the instructor's permission.

The grade of "I" is normally given only when circumstances beyond the control of the student prevent completion of course requirements. Students receiving a grade of "I" are responsible for finding out from the instructor the exact work required to remove the incomplete. In the case of a required course, work shall ordinarily be completed and a letter grade received by the end of the fifth week of the next quarter the student is enrolled or sooner at the discretion of the instructor and course director. An "I" grade not removed by midterm will revert to a final grade as determined by the course director. A grade of incomplete in an elective course will automatically revert to



a failing grade unless a change of grade is received by the registrar within one calendar year.

Undergraduate students may repeat a practicum course in which they received a grade of F. The new grade replaces the F in the cumulative grade point average. Such a repetition may be done only once.

*Dean's List.* Undergraduate students earning a 3.5 or higher grade point average for at least 12 credits for a quarter are given recognition by having their names placed on the dean's list.

*Graduate Student Grades.* Graduate students must earn a 3.0 cumulative grade point average to graduate. Health Systems Management students may repeat a course in which a C or an F grade has been assigned. In all other programs, students must repeat a required course in which a D or an F grade has been assigned. Only one course may be

repeated but the grade for the repeated course replaces the earlier grade in the cumulative grade point average. Therefore, a student who earns a D or an F grade in more than one required course in any of these programs will be dismissed from Rush University.

Graduate students may request an Incomplete from the course director. An I grade not removed by the end of the next quarter will revert to a final grade as determined by the course director.

In some programs, elective courses may be taken for a pass or not pass (P/N) grade. The student must negotiate with the instructor of an elective course within the first week of classes to establish whether a letter or a P/N grading system will be used. Students are referred to their program director or faculty advisor regarding specific policies governing grades in elective courses.

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## Academic Progression

The faculty reserves the right to request the withdrawal of any student whose conduct, health, or performance demonstrates lack of fitness for continuance in a health profession. Any such student not voluntarily withdrawing will be dismissed from the University.

*Medical Technology Program.* High academic performance in required courses is expected. Undergraduate students will be considered in good standing at Rush University unless placed on academic probation.

Academic probation is assigned to any student who earns a quarterly grade point average below 2.0 or whose cumulative grade point average falls below 2.0. Students placed on probation have two quarters in which to regain the status of good standing. Failure to do so will result in dismissal from the University. Medical technology students may receive no more than one D in the following courses each year to remain in the program:

BIOCH 401, 402, 403, 404  
IMMUN 301, 402, 403, 421  
MICRO 311, 411  
HEM 301, 425, 426  
MEDTK 301, 303

An F grade in any of these courses will result in dismissal.

Each student in the medical technology program must pass a Departmental Comprehensive Examination which is given following the third year of study. This examination covers all material presented in the third year curriculum. Students failing this examination will not be allowed to continue to the fourth year of the program when the practicum courses are offered. A failing mark on the Departmental Comprehensive Examination given at the end of the third year of the program results in dismissal from the program regardless of previous grades earned.

In the fourth year of the program, work in practicum courses must be at the "C" level or better. Any work in practicum courses below the level required for a C grade will result in an F grade. An F grade in such courses may be repeated only once with the new grade replacing the F in the cumulative grade point average. A second grade of F in a practicum course will result in dismissal.

*Clinical Nutrition Program.* Only grades of A, B or C may fulfill degree requirements in all required courses as listed in the cur-

riculum outline. Students will be considered in good standing at Rush University unless placed on academic probation.

Academic probation is assigned to a student who earns a quarterly grade point average between 2.0 and 2.99 inclusive, or whose cumulative grade point average falls below 3.0. Full-time students placed on probation must earn a cumulative grade point average of 3.0 or greater at the end of the next consecutive quarter. Part-time students placed on probation must earn a cumulative grade point average of 3.0 or greater by the end of the next two consecutive quarters.

A student who earns a quarterly grade point average below 2.0 will be dismissed from the University. A student who earns a grade of D or F in a required course must repeat the course. Only one required course may be repeated and the new grade will replace the earlier D or F grade in the cumulative grade point average. Failure to earn a grade of C or better in a repeated course will result in dismissal from the University.

*Health Systems Management Program.* Only grades of A, B, or C may fulfill degree requirements in all required courses as listed in the curriculum outline. Automatic probation shall result when a student falls below a cumulative grade point average of 3.0 or when a student receives a grade of F in any course. A student placed on academic probation shall be informed in writing by the Committee on Progress and Promotions. The letter shall state the reason(s) why the student has been placed on academic probation and what conditions must be satisfied to be removed from probationary status. Any HSM student may be placed on academic probation when the student's academic deficiencies are sufficiently significant as judged by the Committee.

Two consecutive quarters with less than a cumulative 3.0 average constitutes grounds for dismissal.

*Occupational Therapy Program.* Only grades of A, B or C may fulfill degree requirements in all required courses as listed in the curriculum outline. Students will be considered in good standing at Rush University unless placed on academic probation.

Academic probation is assigned to a student who earns a quarterly grade point average between 2.0 and 2.99 inclusive, or whose cumulative grade point average falls below 3.0. Full time students placed on probation must earn a cumulative grade point average of 3.0 or greater at the end of the next consecutive quarter. Part time students placed on probation must earn a cumulative grade point average of 3.0 or greater by the end of the next two consecutive quarters.

A student who earns a quarterly grade point average below 2.0 will be dismissed from the University. A student who earns a grade of D or F in a required course must repeat the course. Only one required course may be repeated and the new grade will replace the earlier D or F grade in the cumulative grade point average. Failure to earn a grade of C or better in a repeated course will result in dismissal from the University.

*Speech and Hearing Sciences Programs.* Only grades of A, B or C may fulfill degree requirements in all required courses as listed in the curriculum outline. Students will be considered in good standing at Rush University unless placed on academic probation.

Academic probation is assigned to a student who earns a quarterly grade point average between 2.0 and 2.99 inclusive, or whose cumulative grade point average falls below 3.0. Full time students placed on probation must earn a cumulative grade point average of 3.0 or greater at the end of the next consecutive quarter. Part time students placed on probation must earn a cumulative grade point average of 3.0 or greater by the end of the next two consecutive quarters.



A student who earns a quarterly grade point average below 2.0 will be dismissed from the University. A student who earns a grade of D or F in a required course must repeat the course. Only one required course

may be repeated and the new grade will replace the earlier D or F grade in the cumulative grade point average. Failure to earn a grade of C or better in a repeated course will result in dismissal from the University.

**Requirements for Graduation**

*Bachelor of Science.* The bachelor of science degree, with a major in medical technology, requires a minimum of 180 quarter hours. This includes at least 90 quarter hours earned as a lower division student at an affiliated school or before entrance as a transfer student.

Candidates for the bachelor of science degree must earn a 2.0 cumulative grade point average in all computed upper division credits taken at Rush University.

Participation in cap and gown at commencement exercises is expected of all graduates.

After receiving the baccalaureate degree, graduates are eligible to take the National Certifying Examination given by the Board of Registry of the American Society of Clinical Pathologists, as well as other national certifying agencies.

*Graduation Honors.* Candidates for the bachelor of science degree who have demonstrated academic excellence are honored at commencement exercises by the Rush University faculty each spring. Those earning a

3.4 or better grade point average based on six quarters at Rush are awarded the bachelor of science *cum laude*; those with 3.6 or better, *magna cum laude*; those with 3.8 or better, *summa cum laude*. This is based on six quarters of work at Rush and does not include any work done at other institutions.

*Master of Science.* The Master of Science degree requires a cumulative grade point average of 3.0 or greater to graduate. All degree requirements must be completed within 36 months from the beginning of the first quarter in which the student is enrolled in the program. The minimum number of quarter hours required for graduation varies and is specific to each program as follows:

Clinical Nutrition	
Track I	72
Track II	59
Track III	59
Health Systems Management	90
Occupational Therapy	56
Speech and Hearing Sciences	
Speech/Language Pathology	100
Audiology	99

**Reenrollment**

Any student who has withdrawn from a program and who wishes to reenroll, or has not been enrolled for two consecutive quarters, or any dismissed student who seeks to reapply to a program must submit an application for this purpose with a fee of \$25 to the Office of Admissions. Applications for reenrollment must be received at least one quar-

ter before the planned return. Reentering students must meet the conditions for reenrollment stated in their dismissal or reentry acceptance letter, and all policies, requirements, and course sequence in effect at the time of reentry. The student will pay tuition and fees at the rates in effect at the time of the reenrollment.

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## Student Records

The Family Educational Rights and Privacy Act of 1974 protects the privacy of current and former students enrolled in most educational institutions.

Rush University has five official student records for health science students. A student or former student may inspect and review these records after making an appointment with the appropriate office. The records and their locations are as follows:

1. Official academic record (transcript)—Office of the Registrar, 1 Schweppe-Sprague.
2. Registrar's folder—Contains admission application, transcripts from other schools, registration information—Office of Registrar, 1 Schweppe-Sprague.
3. Department folder—Contains written evaluation of clinical work, curricular flow charts, grade report copies—offices of the program directors, clinical nutrition, medical technology, and occupational therapy, 4 Schweppe-Sprague—speech and hearing sciences, 2 Senn—religion and health, 7 Schweppe-Sprague—health systems management, 12 Jelke.
4. Financial affairs folder—Records showing all billing and payments, notes and correspondence dealing with a student's finance—Office of Student Financial Affairs, 1 Schweppe-Sprague.
5. Financial aid folder—All information concerning financial aid for the student—Office of Financial Aid, 1 Schweppe-Sprague.

Students may obtain copies of transcripts from the institutions that hold the original records. Other portions of their records will be

copied upon request. The request must be in writing, signed, and specifically identify the record desired and include the student's major, year, date of birth and social security number. There is no charge for copies of the student transcript. Other reproductions cost 50 cents per page. The University honors requests as long as there is no outstanding obligation to the Medical Center. Students within commuting distance may be asked to review the desired data in person.

Students may request that the University amend information in their records that they believe to be inaccurate, misleading, or that violates their privacy. If the University refuses to amend the records as the student wishes, he/she may request a hearing in order to challenge that decision. A hearing will be granted. Students may place in their educational records statements commenting upon information in the records and/or stating their grievances with a decision not to amend the record.

Administrators who maintain the records adhere to a policy of limited access for administrators and faculty of Rush University having a need for information in order for their offices to function, to determine academic progress or to designate award recipients. Other persons or organizations given access are those responsible for accrediting the institution, for providing the student with financial aid, for complying with a judicial court order and for protecting the health or safety of students in an emergency.

Any disclosure of a student's record to others not listed in these policies must have prior written consent of the student. Requests for information and letter of consent of the student are kept with the records.



A student may waive any of his/her rights under the act and its regulations.

A student may file a written complaint with the Family Educational Rights and Privacy Act Office regarding alleged violations of the General Education Provisions Act and

its regulations.

Copies of the act and these written policies and procedures may be obtained from the Office of the Registrar, 101 Schweppe-Sprague.

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### **Directory Information**

Certain information is classified by Rush University as directory information: student's full name, local address and phone number, date and place of birth, major field of study, year in school or class, participation in officially recognized activities, dates of attendance, degrees and awards received, previous educational institutions attended by the student and previous majors, and degrees and years earned.

Each fall quarter the Rush Student Address Book is published for student, faculty, and staff use. It contains the student's

name, local address and phone number, major, and class.

At the time of commencement exercises this information is released in public announcements: student's full name, degree and major, previous institution and degree(s) earned, and home town.

Students may restrict the release of any item of information that is considered as directory information on a form provided in the Office of the Registrar, 1 Schweppe-Sprague, by Friday of the first week of classes each quarter.

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**Human Investigation**

Any project or study involving human subjects must have approval of the Medical Center Committee on Human Investigation. Studies in the community as well as within

the Medical Center must have this approval. The Office of Research Affairs handles all requests and has established the protocol for proper investigative procedures.







# Financial Affairs

## Expenses

Expenses listed in this section apply to third and fourth year students in the undergraduate program and all students in graduate programs. Expenses for the first years of undergraduate study will depend upon tuition, fees, room, board, and other expenses at the affiliated college attended.

All expenses listed in this section are current estimates of cost levels as of the beginning of fall term 1981. The actual charge of

tuition and fees is subject to change without notice, and other budgetary costs used in the determination of financial aid eligibility may also vary somewhat. Institutions utilizing federal aid funds, including Rush, derive living expense levels based upon Bureau of Labor Statistics at the moderate level. Students receiving financial aid must conform their living expenses to these allowable budgets.

Estimated Undergraduate Costs	per academic year of three quarters
Tuition	\$3,885
Activity Fee (Fall quarter only)	10
Insurance	100
Books and Supplies	350
Housing and Food (estimated campus housing expense)*	3,055
Transportation	230
Personal	765
	\$8,395

Estimated Graduate Costs	per academic year of four quarters
Tuition	\$ 6,060
Activity Fee (Fall quarter only)	10
Insurance	135
Books and Supplies	500
Housing and Utilities	2,950
Food	1,650
Transportation	310
Personal	1,015
	\$12,630

\*Living expenses of \$495 per month include housing, food, transportation and personal.

Students not living on campus and those who are married or who have dependent children will, of course, incur greater living expenses.

## Tuition and Fees

**Undergraduate Tuition:** Full-time students taking from 12 to 16 credits are assessed \$1,129 per quarter. Students taking from 1 to 11, or more than 16 credits are assessed \$110 per credit. While enrolled as either part or full time, single coverage under ANCHOR is provided at no additional charge. (See Health Services for further information.)

**Graduate Tuition:** Full-time students taking from 12 to 15 credits are assessed \$1,515 per quarter. Students taking from 1 to 11, or more than 15 credits are assessed \$130 per credit. While enrolled as either part or full time, single coverage under ANCHOR is provided at no additional charge. (See Health Services for further information.)



**Application Fee:** A non-refundable application fee of \$25 is required of all applicants to offset the expense of processing the application, evaluating credentials and maintaining a library of evaluation aids.

**Readmission Fee:** Students who have withdrawn and who wish to reenroll or students who have been dismissed from a program and who seek to reapply for admission must pay a non-refundable \$25 readmission fee. This fee helps offset the processing of the application for reenrollment, evaluation of credentials and committee review and deliberation time.

**Enrollment Deposit:** A \$50 enrollment deposit is required of all students (including affiliated students) accepted for entrance in fall, prior to matriculation. This assures a

place in the entering class. This deposit is non-refundable and applies toward payment of the first quarter tuition.

**Activity Fee:** An annual, non-refundable activity fee of \$10 (\$5 for part-time students) is assessed for those in the fall quarter only. This fee includes publishing of the student newsletter, *The Rush Reporter*, movies, dances, parties, game room, and other student activities administered by the Office of Student Affairs.

**Microscope Rental:** Microscopes are available to students for a rental fee which covers repairs or replacement as well as administration of the rental program.

**Insurance:** All students must have hospitalization coverage. (See Health Services for further information.)

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### **Tuition Payment Policy**

Tuition and fees are to be paid or satisfactory arrangements for payments made with the Office of Student Financial Affairs before registration is complete. Students may not attend classes until after registration is complete. Any exception to this policy must be approved in writing by the Associate Dean for Academic Support Services.

Students have the responsibility to complete one or a combination of the following courses of action on or before the first day of classes of each quarter.

1. *Pay total tuition and fees for the quarter.*
2. *Complete a Deferred Payment Plan Contract.* This plan requires that one-third tuition, all fees, and a \$15 service charge be paid on or before the first day of classes. Additional payments of one-third tuition are due on the fourth and eighth Monday of the quarter. Forms are available in the Office of Student Financial Affairs.
3. *Complete a Financial Aid Late Payment Form.* This form, initiated by the student and completed by the Financial Aid Office, is to be filed when the student is

receiving external aid and when that aid has not arrived at the University by the beginning of the term. This would occur, for example, when a guaranteed loan is needed to pay tuition and the proceeds from the bank have not been received by the beginning of the quarter. For that portion of tuition and fees not covered by this external aid, the student must complete step one or two for the remaining amount. Forms are available in the Office of Student Financial Aid.

Any student dismissed for failure to satisfy his or her financial obligation will:

1. Be covered by Anchor/Blue Cross for the remainder of the quarter if the appropriate fees are paid.
2. Be dismissed from on-campus student housing.
3. Lose locker and mail privileges.

Students who are reinstated by decision of the dean will pay reregistration of \$25.

Students who wish to reenroll the following quarter or year should contact the Registrar of Rush University.

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### Refund Policy

Official withdrawal from a course, or from the college, entitles a student to a refund of tuition according to the schedule listed below. No other fees are refundable.

A student may receive a 100 percent refund if withdrawal is during the first calendar week in which classes begin. Otherwise, refunds will be made as follows:

Second week—80 percent refund

Third week—60 percent refund

Fourth week—40 percent refund

Fifth week—20 percent refund

After fifth week—no refund

Students may request the refund to be shown as a credit on their account or request a check for the amount of the refund, less any amount still owed for other charges. Normally, checks are processed within two weeks.

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### Financial Aid

The purpose of the financial aid program for students of Rush University is to attempt to provide financial assistance to all admitted students in need of such assistance so that Rush University can be a viable choice of schools for *all* who desire to attend, regardless of financial circumstances. To the extent that they are able, parents and students are expected to provide a contribution toward educational expenses, the amount of which is measured under a standard set of criteria by either the College Scholarship Service or the Educational Testing Service. The Office of Student Financial Aid at Rush University attempts to provide and coordinate various programs of financial assistance for the student to make up the difference between what it costs the individual to attend Rush University and what the family and student are reasonably able to contribute towards the student's educational expenses.

More detailed information on financial aid is provided in the Rush University Student Financial Aid Handbook, which is sent to all applicants for admissions. The staff of the Office of Student Financial Aid is available on a daily basis to consult with students and parents on all matters regarding the financing of a Rush University education. Students and parents are welcomed and encouraged to make use of these services.

**Application Procedure.** To apply for financial aid from Rush University as well as from outside sources, the student should complete the forms listed below.

1. Rush University Financial Aid Application.

2. Financial Aid Form (FAF), including the supplement (financial aid form processed by the College Scholarship Service). *Undergraduate students only.*

The FAF serves as an application for Basic Pell Grant and for financial aid programs administered by Rush University. The code number for the College of Health Sciences is 3262.

3. Graduate and Professional School Financial Aid Service statement (GAPSFAS). *Graduate students only.*
4. Financial Aid Transcript. *New students only.* A Financial Aid Transcript must be completed by each school previously attended. Transcript forms are available in the Office of Student Financial Aid.
5. Illinois State Scholarship Commission (ISSC) Monetary Award application. *Illinois residents without baccalaureate degrees only.*
6. Guaranteed Student Loan application. Available at participating banks.
7. Applications for aid from any outside foundations or agencies for which the student might be eligible. Students are encouraged to consult reference materials in the Office of Student Financial Aid regarding the availability of outside scholarships.

**Application Deadline.** Financial aid is awarded on a first come-first served basis until all funds have been expended. In order to receive the fullest consideration for aid from Rush University, application forms should be mailed by April 1st. Students admitted after April 1st should submit applications immediately after receiving them.



*Renewability of Financial Aid.* The student must resubmit *all* financial aid application forms each and every year in which financial aid is being requested. Renewability will be generally contingent both upon the student's having continued financial need and the availability of funds for student aid.

*Financial Aid Award.* After considering the family resources and aid awarded to the student by the Basic Pell Grant Program,

Illinois State Scholarship Program, and private agencies (where applicable), the Office of Student Financial Aid will attempt to provide additional funds if further demonstrated need exists. In varying quantities, a financial aid award may include scholarships, grants, loans, and employment. The financial aid programs listed in the next section are drawn upon by the Office of Student Financial Aid to create an award for each eligible student.

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## Scholarships/Grants

### Basic Educational Opportunity Grant (Pell Grant)

The Pell Grant is a federal program based solely upon the student's financial need; it is designed to provide the first portion of an undergraduate student's aid package.

Awards currently range up to a maximum of \$1,750 per year. All eligible students are required to apply for this grant before they will be given consideration for financial aid from the University. Students apply for the Pell Grant by completing the FAF and indicating that they want their financial information released to the Basic Grant Processing Center. In reply, students receive a Student Eligibility Report (SER) which must then be forwarded to the financial aid office where the amount of the award will be computed.

If the student is not eligible for an award, one copy of the SER should nonetheless be forwarded to the financial aid office as evidence of the student's having applied for the program. *Students who possess a baccalaureate degree are ineligible for the Pell Grant.*

**Faculty Wives Scholarship.** A scholarship fund for Rush University students has been established by a generous contribution from the wives of the faculty. These scholarships will be awarded on the basis of academic potential and financial need.

**Faculty Women's Scholarship.** A generous contribution from the women of the Rush University faculty has provided a scholarship fund for female students in Rush University. Awards are based upon character, academic promise, and financial need.

**Illinois State Scholarship Commission (ISSC) Monetary Award Program.** This state grant program is designed to help meet the financial needs of Illinois students attending the Illinois schools. Awards currently range up to a maximum of \$1,900 per year and are based strictly upon financial need. Students apply directly to the ISSC and receive notification of status informing them of the level of their award. *Students who have completed more than 225 quarter hours of study or who have attained a baccalaureate degree are ineligible for the state scholarship program.*

**Rush University Scholarships.** Scholarships are available each year through contributions from private donors and institutional sources.

**Supplemental Educational Opportunity Grant (SEOG) Program.** A federal gift aid program distributed to undergraduate students on the basis of financial need. Only students who have *not* already received a bachelor's degree are eligible.

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## Loans

**Guaranteed Student Loan Program:** Under the Guaranteed Student Loan Program students make application directly to participating lending institutions (banks, savings and loan associations, credit unions, etc.) and the state and federal governments act as guarantee agent for the funds. Eligibility is not based on financial need. Interest on the loan is paid for all students by the government while the student is in school. The student pays nine percent interest during repayment, which commences six months after leaving school. For full-time undergraduates the annual maximum is \$2,500 for dependent students and \$3,000 for independent students. The annual maximum for full-time graduate

students is \$5,000. The cumulative maximum for graduate students is \$25,000. Applications are available at the lending institutions.

**National Direct Student Loan Program:** A campus-based federally-funded program, wherein funds are awarded by the Financial Aid Office to undergraduate and graduate students on the basis of financial need. The principal repayment and interest charges are deferred until nine months after the student ceases attendance. Interest is at the simply compounded rate of four percent per annum. The loan fund under this program is a revolving fund, providing for loan repayments to become future loan funds for other needy students at Rush University.

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## Employment

**College Work-Study Program:** Under the federal College Work-Study Program students with demonstrated financial need work part-time to help meet costs of attendance. Work-study awards and job placement are handled by the Office of Student Financial Aid.

**Medical Center Employment:** Students who are not eligible for College Work-Study are encouraged to investigate the part-time job opportunities at Rush-Presbyterian-St.

Luke's Medical Center (RPSLMC) which are posted in the Employment Office on the second floor of the Professional Building.

**Health Systems Management Work-Study:** Every effort is made to assist students in the Health Systems Management Program in finding part-time employment. Some jobs are available at RPSLMC and work-study arrangements may also be developed for students to be employed outside of the Medical Center.





# The College of Health Sciences



The following pages describe the departments and divisions of the College, their research, educational, and service programs; and the policies and procedures governing student admission.





The College of Health Sciences is an integral and dynamic component of Rush University and Rush-Presbyterian-St. Luke's Medical Center. Formally charged with educating future health care professionals, the college has recently grown to include a number of academic professional programs and to provide a solid base for investigative research projects.

The college has been successful in blending the education of health science professionals with others involved in the delivery of health care by integrating programs with medicine and nursing on teaching, research and operational levels.

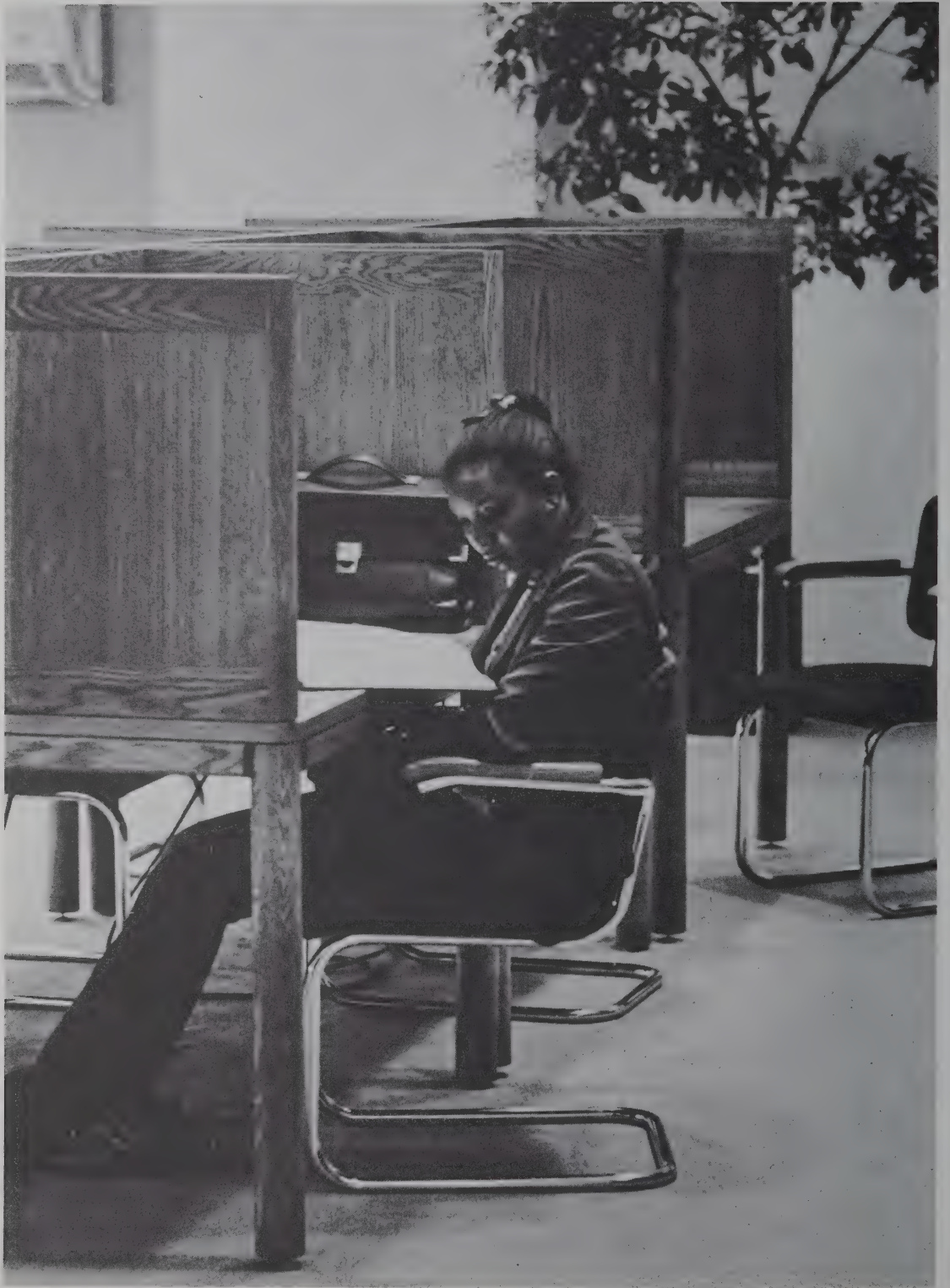
Important to this integration is the practitioner/teacher concept. This model,

which is used throughout the University, forms the basis for most educational activities. This concept uniquely permits the faculty to bring to their academic endeavors a blend of practical realism and academic rigor.

I welcome your interest in the College of Health Sciences and its academic programs. We are proud of the quality of education that we offer. Our students and faculty, by utilizing the philosophy and resources of this Medical Center, play an ever-increasing role in the health care delivery process.

Bruce C. Campbell, Dr. P. H.  
Acting Dean  
College of Health Sciences





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## The College of Health Sciences

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Department of Health Systems Management

Section of Computer Sciences

Department of Related Health Programs

Section of Clinical Nutrition

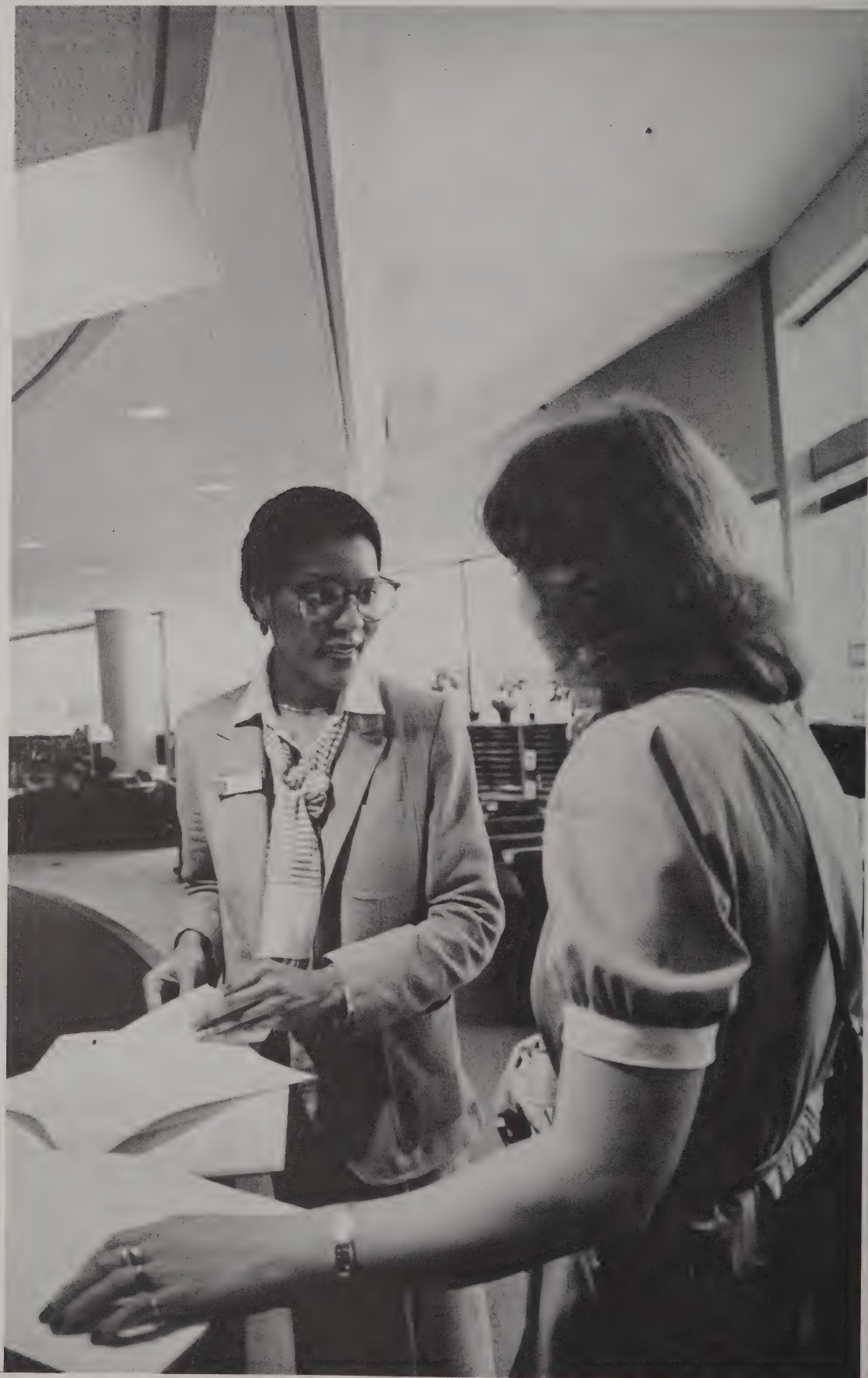
Section of Medical Technology

Section of Occupational Therapy

Section of Speech and Hearing Sciences

Department of Religion and Health





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# Department of Health Systems Management

Master of Science (M.S.) in Health Systems Management

Bruce C. Campbell, Dr. P.H., Acting Chairperson

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## Faculty

Barnard, C.	Freeman, C.	Kronman, B.	Rothstein, R.
Bass, G.	Freeman, J.	La Jone, L.	Sinioris, M.
Bishop, J.	Freund, L.	Lepper, M.	Sochacki, S.
Block, A.	Glessner, M.	Lerner, W.	Thompson, L.
Bonilla, M.	Hamilton, R.	Lewandowski, R.	Tighe, J.
Bradley, W.	Hausmann, R. K.	Lippner, L.	Trufant, J.
Brown, M.	Houston, E.	McNulty, T.	Warden, G.
Bruun, E.	Howard, D.	Menning, W.	Weiser, S.
Campbell, B.	Jelinek, R.	Mullner, R.	Whitaker, R.
Carvalho, A.	Kaatz, G.	Norman, J.	Zieserl, R.
Cohen, B.	Kerr, J.	Oder, D.	Zimmerman, R.
Crane, E.	Killingsworth, C.	Paul, H.	
Donovan, A.	Kjerulff, K.	Pierce, F.	
Esmond, T.	Knight, R.	Roach, W.	

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The Department of Health Systems Management was formally established in 1975. The department's goals are: 1) to provide a graduate program for health systems managers; 2) to provide postgraduate and continuing education for health systems managers; and 3) to develop and apply research to improve the health delivery system.

Faculty members provide service to the Medical Center and the local community through the management positions they hold, through involvement in a wide range of

applied research efforts, and through active participation in a variety of community and academic forums. In addition, through their positions as hospital administrators, health care planners, academic managers, hospital and health care consultants, and officers within national associations, the faculty brings to their academic endeavors a unique blend of academic rigor and practical realism. As a result, the faculty personifies the teacher/practitioner model that forms the basis for all departmental activities.

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## Educational Activities

The Health Systems Management Program at Rush University is a graduate professional program designed to train individuals for careers that will focus on the major problems facing one of the nation's fastest growing industries.

Students are accepted from a wide variety of academic backgrounds. The program provides a strong foundation in health care management and system/industrial engineering through the traditional didactic avenue and through a unique, practical, educational experience at Rush-Presbyterian-St. Luke's Medical Center and its network of affiliated institutions. Students in the program will work with physicians, health scientists, nurses, hospital administrators, health planners, and others concerned with improving quality, controlling costs, and increasing the

overall effectiveness and efficiency of the health care delivery system. The program offers students actual management experience in a medical center environment.

Career opportunities for graduates of the health systems management program are widely distributed among a variety of health systems and management-related positions. In addition to preparing students for traditional opportunities in hospitals and other health-related institutions, the program will emphasize preparation for administrative positions within:

- multihospital systems on either the corporate or operational level
- consulting firms specializing in health systems
- voluntary agencies and associations in the health field



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### Program Objectives

The program in health systems management undertakes to teach the student to:

- function as a health systems manager with a commitment to the improvement of the health care system
- synthesize principles and concepts of health care delivery, health care management, and systems methodology
- plan, implement, and evaluate health systems
- apply problem-solving principles when making improvements in the health care delivery system
- function independently of and inter-dependently with other members of the health care team
- relate findings of research to systems management practice
- explore areas for continued research
- analyze the health care system and the manager's role in the context of interacting social, economic, and political systems
- cope with rapid changes in the patterns of health care to initiate and guide these changes effectively

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### Curriculum

The overall structure of the curriculum consists of two components:

1. A core set of courses required of all students.
2. A set of electives and required courses allowing a student to achieve a concentration specialty.

The *core sequence* consists of 18 courses and totals 70 credit hours. These courses are scheduled primarily during the first year; but all quarters contain some core courses. The goal of the core sequence is to provide a broad and vigorous foundation of basic and applied skills on which a student can build a concentration specialty. The core sequence covers the following areas:

1. Social-behavioral disciplines
2. Factors affecting health and disease
3. Personal health delivery systems
4. Management and administrative skills

The *concentration sequence* consists of a variable number of courses and totals 20 credit hours. Within general guidelines, the precise form and sequence of concentration courses are student-dependent. However, because of the sequencing of core courses,

the concentration sequence occurs in the second year. A student must declare a concentration by the end of the first year. Guidance and consultation is given to each student by a faculty representative from that concentration specialty. The goal of the concentration sequence is to allow the student to acquire both theoretical and practical experience in one of four concentration areas:

1. Financial Management
2. Human Resources Management
3. Operations Management
4. Planning/Public Policy

This experience is acquired through a structured, yet flexible sequence consisting of a set of concentration specific required and elective courses, and a graduate seminar or thesis defense which is required of all students regardless of concentration areas.

Consequently, the student progresses from acquiring generic skills to broadly applying these skills, to obtaining concentration experiences, to integrating concepts in a graduate seminar.

The curriculum is offered full-time only.

## Health Systems Management Curriculum

Fall Quarter			Winter Quarter			Spring Quarter		
FIRST YEAR								
CORE SEQUENCE								
HSMGT 501 Medical Care Organizations	4	HSMGT 533 Health Economics	3	HSMGT 523 Treatment Process/Epidemiology	3			
HSMGT 506 Medical Sociology	3	HSMGT 545 Management Theory/Organizational Analysis	4	HSMGT 511 Administrative Decision Making	4			
HSMGT 583 Statistical Techniques I	4	HSMGT 584 Statistical Techniques II	4	HSMGT 534 Health Care Finance	4			
HSMGT 553 Computers for Health Systems Managers	4	HSMGT 585 Quantitative Methods	4	HSMGT 563 Health Care Planning/Public Policy	4			
15			15			15		
SECOND YEAR								
CORE SEQUENCE								
HSMGT 515 Human Resources Management	4	HSMGT 522 Multi-Institutional Arrangements	3	HSMGT 543 Health/Corporate Law	4			
HSMGT 535 Budgeting/Forecasting	4	HSMGT 566 Corporate Planning/Marketing	3	HSMGT 595 Graduate Seminar	3			
HSMGT 552 Management Information Systems	4							
CONCENTRATION SEQUENCE								
Financial Management (14 elective hours)								
Elective	3	HSMGT 536 Corporate Finance Elective	3 6	HSMGT 537 Reimbursement/Regulation Elective	3 5			
Human Resources Management (11 elective hours)								
Elective	3	HSMGT 516 Personnel/Compensation	3	HSMGT 517 Labor Relations Elective	3 5			
		HSMGT 547 Labor Law Elective	3					
Operational Management (14 elective hours)								
Elective	3	HSMGT 536 Corporate Finance	3	Elective	8			
		HSMGT 555 Advanced Organizational Analysis Elective	3 3					
Planning/Public Policy (11 elective hours)								
Elective	3	HSMGT 536 Corporate Finance Elective	3 6	HSMGT 564 Public Policy/Regional Planning	3			
				HSMGT 565 Facilities Planning Elective	3 2			
ELECTIVES								
HSMGT 581 Experimental Design/Program Evaluation	3	HSMGT 598 Thesis	3-6	HSMGT 598 Thesis	1-6			
		HSMGT 597 Graduate Project	3-6	HSMGT 597 Graduate Project	1-6			
HSMGT 587 Advanced Operations Research/Modeling	3	HSMGT 518 Health Manpower Planning	3	HSMGT 557 Quality Assurance Risk Mgt.	3			
				HSMGT 572 Community Health Assessment	3			
				HSMGT 556 Ambulatory Care Management	3			



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## Admissions

Prospective students should have a baccalaureate degree from an accredited college or university. A basic course in financial accounting and statistics is a required minimum. In addition, courses in economics (macro and micro) and computer science are strongly recommended.

A record of academic excellence is an important consideration. Applicants with graduate credit in quantitative or administrative fields who are seeking to complete their master's degree or obtain a second master's degree, are strongly encouraged to apply. Such preparation may reduce the program length. Each application will be evaluated on an individual basis by the admissions committee.

Students should submit the following:

1. a completed application form accompanied by the \$25 nonrefundable application fee;
2. a copy of official transcripts of all previ-

ous college and university studies;

3. three letters of recommendation giving evidence of ability to take part in the program; and
4. scores from the Graduate Record Examination or the Graduate Management Aptitude Test.

An interview with members of the faculty is required of all applicants prior to admission. Chance for admission to the program may increase if you return a completed application by March 1.

## Method of Application

Application and recommendation forms may be obtained by writing or calling:

The Department of Health Systems  
Management  
Rush University  
1753 West Congress Parkway  
Chicago, IL 60612  
(312) 942-5402

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## Service Activities

Members of the faculty of the Department of Health Systems Management provide service to the Medical Center through the management positions they hold. Hospital administrators, health care planners, academic managers, financial officers, corporate and labor attorneys, and data processing managers function as both practitioners and teachers. The faculty is supported by managers outside the Medical Center who represent hospital and health care consultants, national associations, and network institutions.

Many of the faculty members also provide service to the improvement of the health delivery system through outside committee work. Members of the faculty have represented the institution as well as the department in activities sponsored by the American Hospital Association, the Hospital Financial Management Association, the American College of Hospital Administrators, the Hospital Management Systems Society, and the Illinois Hospital Association.

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## Research Activities

A major goal of the Department of Health Systems Management focuses on research activities. This research includes studies in the smallest operational components of the Medical Center as well as computerized hospital-wide information systems, the evaluation and proposal of models for health care delivery, and the needs of the population served by the Rush University System and its affiliated and associated institutions. During the past few years specific research has been conducted in the areas of patient services, nursing services, hospital and University support services, management information systems, and financial systems.

Research on patient services has ranged from an evaluation of outpatient programs in practicing clinics and the emergency room to the examination of uses of the inpatient facilities at Sheridan Road Hospital and Johnston R. Bowman Health Center for the Elderly. Both nursing staffing and nursing productivity assessments have been conducted, with special emphasis placed on primary nursing care. Research in hospital and University support services has resulted in a unique system of evaluating housekeeping quality and financial and statistical indices for medical colleges. Project studies in management information systems areas have resulted in improved census systems, better attendance and overtime systems, and an evaluation of the implementation of the Spectra 2000 Medical Information System at Sheridan Road Hospital. Cost pricing analysis and a systems analysis of the Medical Center budget process have been undertaken in financial system research.

A listing of research projects, papers, books, chapters and reviews follows.

## *Research Projects (1980-81)*

Title: The Evaluations of Hazards Within the Workplace.

Investigators: Crane, E., Hayashi, J., Mattenheimer, H., Padonu, G., McLean, A., and Russe, H.

Status: Started 1980

Support: Departmental

Title: Improvement of Instructional Skills.

Investigators: Block, L., and Gray, G.

Status: Started 1980

Support: Departmental

Title: Implementing a Patient Information and Staff Education Network through the Medium of Closed-Circuit Television.

Investigators: Block, L., Lerner, W., and Trufant, J.

Status: Continuing

Support: Departmental

Title: A Simulation Model for Projecting Fixed and Variable Expenses by Cost Center Under Varying Occupancy Assumptions.

Investigators: Lippner, L. and Bovier, F.

Status: Completed

Support: Departmental

Title: Evaluation of a Medical Information System.

Investigators: Hamilton, R., Kjerulff, K., Kronman, B., Grizenko, A., Abrahams, T., Counte, M., Salloway, J., Campbell, B., et al.

Status: Started 1980

Support: Departmental

Title: Evaluation of the Diagnostic Service Cycle.

Investigators: Hamilton, R., Kronman, B., Kaatz, G., Lerner, W., Bass, G., and Taylor, W.

Status: Started 1980

Support: Departmental



Title: Evaluation of a DRG-Based  
Reimbursement System.

Investigators: Esmond, T., Barnard, C.,  
Raynor, W., and Lepper, M.

Status: Started 1980

Support: Departmental

Title: Evaluation of a Surgical Admissions  
Laboratory.

Investigators: Bass, G., Kaatz, G., Taylor,  
W., and Kronman, B.

Status: Completed

Support: Departmental

Title: Micro-Costing Physical and  
Occupational Therapy Services.

Investigators: Lippner, L., and Kowalski, R.

Status: Started 1980

Support: Departmental

Title: Policy Planning Alternatives for  
Skilled Nursing Services.

Investigators: Lippner, L., Pomerantz, R.,  
and Smith, B.

Status: Completed

Support: Departmental

Title: Development of a Unit Assistant  
Program and Re-Organizing of Unit  
Management.

Investigators: Lerner, W., Yoshioka, D.,  
and Hamilton, R.

Status: Continuing

Support: Departmental

Title: Development and Implementation of a  
Medical Records Technician Program.

Investigators: Sochacki, S., and Lerner, W.

Status: Continuing

Support: Departmental

Title: Development and Implementation of a  
Generalized Micro-Costing Methodology.

Investigators: Hamilton, R., Bass, G.,  
Kaatz, G., Taylor, W., and Campbell, B.

Status: Completed

Support: Departmental

Title: Community Nursing Quality  
Assessment.

Investigators: Hobbs, B., Kronman, B., and  
Stewart, J.

Status: Continuing

Support: Departmental

Title: Development and Implementation of a  
Financial System for the Division/College  
of Nursing.

Investigators: Hegyvary, S., Christman, L.,  
Pierce, F., and Kronman, B.

Status: Completed

Support: Departmental

Title: Evaluation of the Levels of Practice  
System Within Nursing.

Investigators: Jamann, J., Elpern, E.,  
Kronman, B., and Burke, M.

Status: Completed

Support: Departmental

Title: Outpatient Laboratory Operations  
Analysis.

Investigators: Campbell, B., Kaatz, G., and  
Kronman, B.

Status: Completed

Support: Departmental

Title: Operating Room Cost Analysis.

Investigators: Bass, B., Knight, R., Kurasz,  
R., and Kronman, B.

Status: Completed

Support: Departmental

Title: Development and Implementation of  
an Operating Room Utilization Report  
System (CISOR).

Investigators: Bass, G., Knight, R.,  
Kelleher, M., and Sals, J.

Status: Completed

Support: Departmental

Title: Development and Implementation of a  
Materials Management System for Phase  
III.

Investigators: Bass, G., Knight, R.,  
Kelleher, M., and Sals, J.

Status: Completed

Support: Departmental

Title: Rationalizing the Health System in Chicago.

Investigators: Campbell, J. A., Lepper, M. H., and Sinioris, M. E.

Status: Completed

Support: Rush-Presbyterian-St. Luke's Medical Center

Title: Network Approach to Cancer Control

Investigators: Sinioris, M. E., and Kittle, F.

Status: Continuing

Support: Illinois Cancer Council;  
Rush-Presbyterian-St. Luke's Medical Center

#### *Papers Published*

Kronman, B., Hamilton, R., Campbell, B., Bass, G.: Determining reliable unit costs for operating room procedures. Proc. 11th Ann HSD (AIIE) Conf. Orlando, Florida, February, 1980.

Lerner, W. M.: Organizing a young administrators group: Meeting an unmet need. Adm. Briefs 14:1-4, 1980.

McNulty, T.: Written credit policy essential for control. Patient Accounts HFMA Manual, Vol. 3, 1980.

Price, E., Crane, E., Taylor, M., Campbell, B.: A data base and reporting system for risk management. Proc 8th Ann Conf Hosp Manag Sys Soc, Orlando, Florida, February, 1980.

Reynolds, R., Heller, E.: Computerized hospital information systems in an academic medical center branch hospital. Proc Soc Comput Med, October, 1979.

Zieserl, R.: Installing and implementing a hospital medical information system. Comput Hos 1:36-39, 1980.

#### *Books, Book Chapters, and Reviews*

Campbell, J. A., Lepper, M. H., Sinioris, M. E.: Rationalizing the Health Care System in Chicago, a Report to the Mayor. Chicago, Rush-Presbyterian-St. Luke's Medical Center, March 21, 1980.

Jelnick, R.: The relationship between productivity and cost containment. In: Report of the 1979 National Forum on Hospital and Health Administration. Department of Health Administration, Durham, North Carolina, Duke University, 1979.

Miller, H., Pierce, F., Perskalla, W., Rath, G.: Nurse utilization algorithm. In: Health Handbook—An International Reference on Care and Cure. Edited by G. K. Chacko. Amsterdam, North-Holland Publishing Co. 1979, pp 675-690.

Roach, W. H. Jr.: Civil and criminal liabilities for withholding or withdrawing extraordinary care. In: Critical Issues in Health Law. Edited by L. J. Dunn, Jr. Boston, American Society of Law and Medicine, 1980, pp 108-139.





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## Department of Related Health Programs

Robert G. Pierleoni, Ed.D., Chairman

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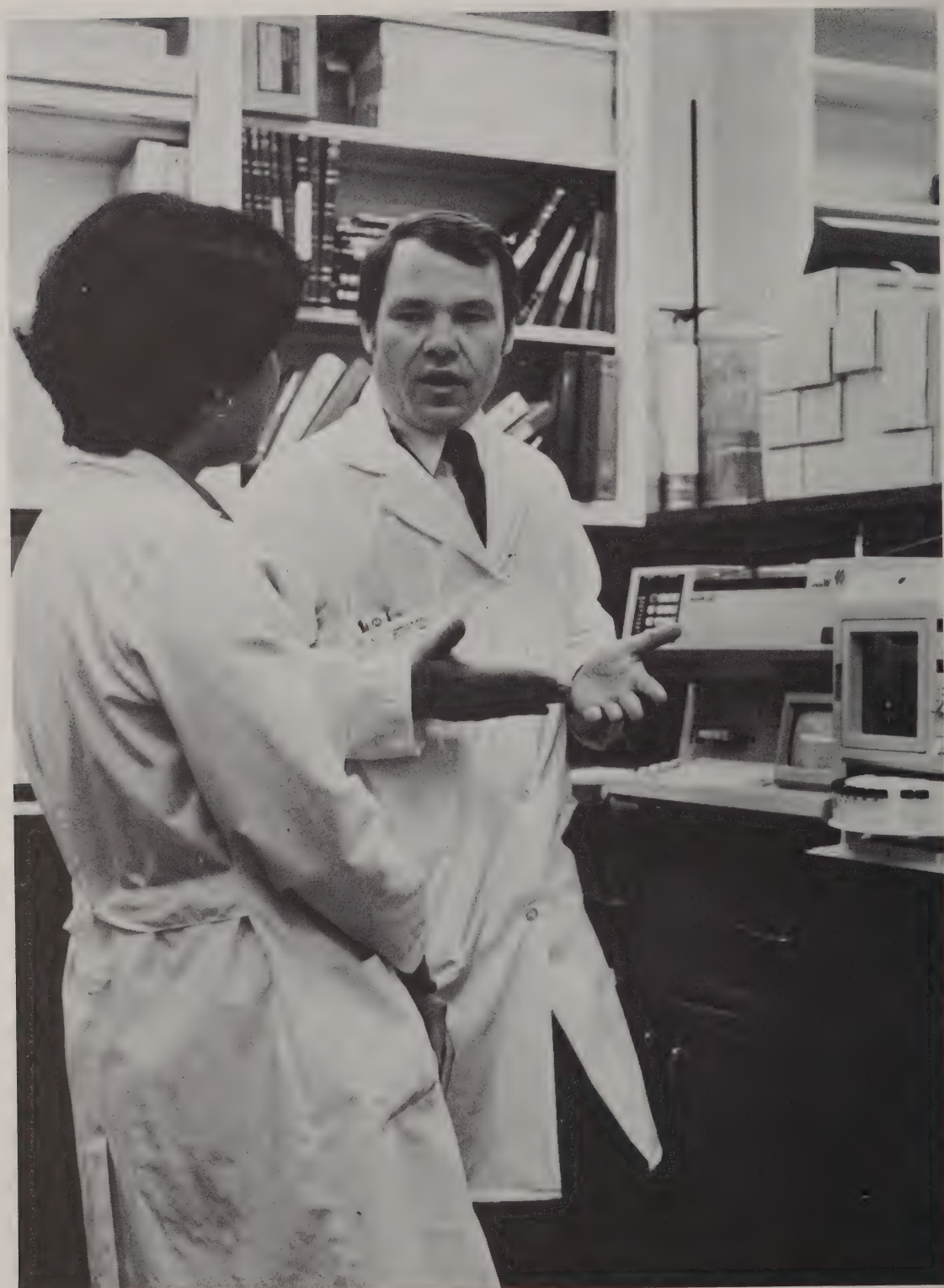
Section of Clinical Nutrition

Section of Medical Technology

Section of Occupational Therapy

Section of Speech and Hearing Sciences





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## Section of Clinical Nutrition

Master of Science (M.S.) in Clinical Nutrition

E. Virginia Pinney, M.S., R.D., Acting Director

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### Faculty

Armstrong, M.  
Ayers, W.  
Betz, E.  
Bezkorovainy, A.  
Carver, L.  
Castellanos, M.

Dolecek, T.  
Frag, W.  
Gernhofer, N.  
Hassel, M.  
Hughes, L.  
Kolodziej, C.

Krueger, C.  
Mackey, L.  
Narins, D.  
Pearl, B.  
Pinney, E.  
Sowa, D.

Tangney, C.  
Van Hoorebeke, K.  
Weddle, D.  
Weissberger, L.  
Wolgemuth, C.

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### Educational Activities

The Section of Clinical Nutrition offers a three-track program leading to a Master of Science degree in Clinical Nutrition. *Track I* is a 15-month dietetic internship/master's degree which permits the student to fulfill the professional experience requirements for membership in the American Dietetic Association and to take the registration examination for dietitians. Coursework is integrated with practical experience throughout the curriculum preparing the student for a leadership role as a dietetic practitioner. *Track II* is a 12-month program designed for the registered dietitian who wishes to expand his/her understanding of advanced human nutrition and management. The curriculum for this track culminates in a clinical practice component which enables the dietitian to

practice advanced dietetic skills. *Track III* is designed for the student with a degree in the health sciences who wishes to enter the field of nutrition or who wishes to supplement another degree. The curriculum for this 12-month track offers extensive human nutrition science coursework and an opportunity for research training and experience.

In addition, the Clinical Nutrition faculty participates in teaching courses offered by other departments, thereby providing medical, nursing, and graduate students of other departments with nutrition education. Both core curriculum nutrition courses and nutrition electives are open to qualified students who are not in the Clinical Nutrition Master's program.

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### Research Activities

The faculty of the Section of Clinical Nutrition is involved in both basic and clinical research. A brief summary of current and recent research activities follows.

A study of the knowledge and attitudes regarding nutrition of second-year students at five medical schools is under way. Included are medical schools with formal nutrition classes as well as those where nutrition is integrated into other courses. Data from individual schools will be compared and the pooled data will be compared to other studies to evaluate trends in the nutrition knowledge and attitudes of medical students.

A survey is in progress in the Rush-Presbyterian-St. Luke's Medical Center and other hospitals to determine the understanding of women regarding the role of nutrition in pregnancy and their knowledge of infant feeding. In this study, changes in weight by the mother during pregnancy will be correlated with the weight and skinfold measurements of her infant. Women will be

interviewed to determine their perceptions regarding weight gain during pregnancy and infant feeding.

During the past several years, assessment of nutritional status has become more widely used to evaluate patients. Some of the current assessment techniques are still in the early stages of development. Two techniques of nutritional screening are currently being evaluated to determine if either method has the potential for quick screening. Other studies include the development of improved methods for evaluating vitamin status and the development of improved standards for upper arm measurements of infants and young children.

Various aspects of obesity are under investigation from basic studies of the long-term effects of early infant feeding to a study of the effectiveness of various methods of weight control in adolescents. Strain, diet, and early feeding experiences have been shown to alter body composition and adipose



tissue metabolism in the rat. These studies are being expanded to explore the effect of pregnancy on fat cell number as well as to continue investigations on early infant feeding.

Data on the growth of formula-fed and breast-fed infants are being collected. Preliminary studies on the composition of human milk and the effects of diet on same are underway.

The importance of nutrition in dental health is being investigated in a study of the dietary consumption of various cariogenic and cariostatic foods and the order in which these foods are consumed by young children. The two-year study will initially identify the non-carious teeth of the children and will then determine changes affected by diet through measurements of salivary carbohydrate, salivary pH and salivary buffering capacity and similar measurements in plaque. Clinical assessment of decayed, missing and filled teeth ratios will also be performed. Nutritional information, obtained from repeated dietary recalls and seven-day food records, will be confirmed by the mother and the child.

#### *Research Projects (1980)*

Title: Nutrition Management of Patients with Methylmalonicacidemia.

Investigators: Roland, D., Kang, D., Weigel, A., and Narins, D.

Status: Continuing

Support: Departmental

Title: Knowledge of Newly-Delivered Mothers Regarding Nutrition During Pregnancy and Early Infancy.

Investigators: Narins, D. M., Frommelt, L., Gugni, M., and Stelman, R.

Status: Continuing

Support: Gerber Industries, Inc.

Title: Effect of Overfeeding Suckling Rats on the Body Composition and Food Intake.

Investigators: Czajka-Narins, D. M., Schemmel, R.,\* Obst, B.,\* Stone, M.,\* and Gill, J. L.\* (\*Michigan State University)

Status: Completed

Support: Weight Watchers Foundation

Title: Multiple Risk Factor Intervention Trial (MRFIT).

Investigators: Schoenberger, J. A., Neri, G., Schoenenberger, J. C., Shekelle, R. B., and Dolecek, T.

Status: Continuing

Support: Department of Health, Education and Welfare, National Heart, Lung and Blood Institute

Title: Survival of Salmonella Typhimurium in Three Selected Brands of Slow Cookers Following Cooking and Holding Procedures.

Investigators: Mackey, L. and Townsend, M. (University of Wisconsin-Stout)

Status: Completed

Support: Departmental

Title: Serum Albumin Levels and Infections in Burned Patients.

Investigators: Nasr, N., and Narins, D.

Status: Continuing

Support: Departmental

Title: Nutrition Knowledge and Attitudes of Second-Year Medical Students.

Investigators: West, P.,\* Narins, D., Parnam, E.,\* and Rosemeyer, D.\* (\*Northern Illinois University)

Status: Continuing

Support: Private Funds

Title: Instant Nutritional Assessment.

Investigators: O'Donnell, J., Lau, E., and Narins, D.

Status: Continuing

Support: Departmental

Title: Use of Buccal Smears in the Assessment of Nutritional Status.

Investigators: O'Donnell, J., Shashinka, N., Narins, D., and Rossof, A.

Status: Continuing

Support: Departmental

Title: Chromium Status of an Elderly Population and the Effect of High-Chromium Yeast Supplementation on Chromium Status and Glucose Tolerance.

Investigators: Cyborski, C. K.,\* Ozerol, N.,\* and Narins, D. (\*University of Illinois)

Status: Continuing

Support: Departmental

Title: Use of Leucocyte Transketolase as an Indicator of Thiamine Status.

Investigators: Narins, D., and Stumpe, M.

Status: Continuing

Support: Departmental

Title: A Study to Determine the Effect of Solubilizers on Parenteral Fat-Soluble Vitamin Preparation on IV Filter Failures.

Investigators: O'Donnell, J., and Ebersman, D.

Status: Completed

Support: Departmental

Title: Taste Acuity and Weight Change in Women with Breast Cancer Receiving Chemotherapy.

Investigators: Fiedler, N., Sudha, W., and Bonomi, P. D.

Status: Continuing

Support: Private Funds

Title: Application of the PLATO System to the Clinical Nutrition Curriculum.

Investigators: Wagn, M., and Narins, D.

Status: Continuing

Support: Departmental

#### *Papers Published:*

Carver, L. R., Lewis, K. J.: A nutrition knowledge test for elementary school teachers. *J. Nutr. Educ* 11:68-71, 1979.

Stone, M., Schemmel, R., Czajka-Narins, D.: Growth and development of the kidneys, heart and liver in S 5B/P1 and Osborne-Mendel rats fed high or low-fat diets. *Int J. Obes* 4:56-78, 1980.

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### **Service Activities**

All members of this section contribute to patient care. For some of the faculty, this is a major responsibility, for others, the service is limited to consultation and/or related research. Faculty members function in administrative positions concerned with procurement, preparation, and distribution of meals and nourishments. Other members of the faculty are part of the health care team and, as such, recommend, implement, and evaluate individualized nutritional therapies for patients during their hospital stay, and during

follow-up visits. Several members also have appointments in the Department of Preventive Medicine and provide the nutritional counseling component in the Multiple Risk Factor Intervention Trial (MR. FIT) based in Oak Brook. They also provide nutrition consultation for several ambulatory care facilities. All members are committed to the dissemination of sound nutritional information, and provide speakers for community groups, radio and television programs, and other organizations as requested.

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### **Goals and Objectives**

The Master of Science in Clinical Nutrition program at Rush is a graduate professional program designed to prepare individuals for careers oriented to patient care, education, and research in nutrition and dietetics.

Track I, the dietetic internship/master's degree program, is designed to prepare the student for a leadership role as a dietetic practitioner. Graduates will be prepared to work with physicians, nurses and other health professionals in providing total care for the patient in a variety of settings. Career possibilities are varied, including the traditional positions in hospitals, departments

of public health, their specialized care facilities, professional organizations and private practice, as well as opportunities in clinical research and teaching. The Track I program integrates academic learning and clinical experience providing opportunities for professional growth in the field of dietetics.

Track II has been developed for dietitians or members of the American Dietetic Association who wish to expand their knowledge and skills in an effort to achieve greater career mobility in leadership roles. Upon completion of the master's program, many of



these graduates are likely to return to the practice of clinical nutrition in a health care institution in a supervisory or managerial position. As with graduates of Track I, the career opportunities for Track II graduates include working with other health care professionals in hospitals, departments of public health, professional organizations, private practice and in educational and research institutions.

Track III has been developed for baccalaureate graduates not necessarily seeking membership in the American Dietetic Association, but who wish to develop a broad base knowledge in human nutrition. This program track offers more extensive science coursework and broader opportunities for research training and experience. Career possibilities for Track III graduates will vary depending to some extent on the student's educational and experiential background prior to entering the program. Graduates of this track will seek positions in health care organizations, educational institutions, research organizations, public health care agencies, private business and industry.

This comprehensive, three-track program provides a strong foundation in the nutrition sciences and, through clinical experiences, provides a unique, applied educational experience at Rush-Presbyterian-St. Luke's Medical Center and its community affiliates. In broad terms, the objectives of this program, as they apply to one or more of the program tracks, may be expressed as follows:

1. To understand through experience the roles of the health care team and to develop an ability to function cooperatively within the team.
2. To recognize the importance of continuing education as an avenue of professional growth.

3. To acquire knowledge and proficiency in the technical skills required in the dietetic profession.
4. To develop problem-solving abilities in the application of scientific theory to the clinical practice of dietetics.
5. To acquire the basic principles of management to assist in the supervision of dietitians and supportive dietetic personnel.
6. To appreciate and practice professional ethics in providing quality health care to the patient and to the community.
7. To advise and recommend to the physician or primary health provider a nutritional management program for the patient, implement the nutritional care plan, and evaluate it to meet the patient's needs.
8. To function as a consultant to the entire health care team—physicians, nurses, occupational therapists, social workers and related health students—regarding the nutritional care of the patient.
9. To function as an educational resource for nutrition information and guidance needed by the health care team in the hospital and the community.
10. To actively engage in community nutrition education activities intended to promote good nutrition and contribute to the prevention and amelioration of sickness.
11. To obtain diet history information and correlate it with physical, anthropometric, clinical and biochemical data to evaluate the nutritional status of the patient in the hospital or in an outpatient clinic.
12. To explore areas for continued nutrition research.

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## Prerequisites

### *Track I*

The student must:

1. hold a Bachelor of Science degree from an accredited college or university;
2. provide evidence of having completed the minimum academic requirements necessary for membership in the American Dietetic Association (designated as Plan IV);
3. provide evidence of having successfully completed a college course in basic statistics;
4. have achieved a minimum cumulative grade point average in college work of 3.0 (on a 4.0 = A grading system); and
5. take the Graduate Record Examination and request score be sent to Rush University.

In addition, evidence of work experience in food service systems and/or clinical dietetics is highly recommended.

### *Track II*

The student must:

1. hold a Bachelor of Science degree from an accredited college or university;
2. provide evidence of membership or registration as a dietitian in the American Dietetic Association;

3. provide evidence of having successfully completed a college course in basic statistics;
4. have achieved a minimum cumulative grade point average in college work of 3.0 (on a 4.0 = A grading system);
5. take the Graduate Record Examination and request score be sent to Rush University; and
6. provide evidence of work experience in food service systems.

### *Track III*

The student must:

1. hold a Bachelor of Science degree from an accredited college or university;
2. provide evidence of having successfully completed courses in the natural sciences, nutrition, statistics, behavioral and social sciences, and in the communication sciences;
3. have achieved a minimum cumulative grade point average in college work of 3.0 (on a 4.0 = A grading system); and
4. take the Graduate Record Examination and request score be sent to Rush University.



## Clinical Nutrition Curriculum

Track I		Track II		Track III	
<b>FALL</b>					
BIOCH 461: Biochemistry I	3	BIOCH 461: Biochemistry I	3	BIOCH 461: Biochemistry I	3
HLCED 523: Communication I	2	PHYSO 551: Nutr. Physiol.	3	PHYSO 551: Nutr. Physiol.	3
NUTRI 503: Dietetics I	4	NUTRI 565: Seminar I	1	NUTRI 565: Seminar I	1
NUTRI 511: Practicum		HLCED 583: Clin. Invest. I	2	HLCED 583: Clin. Invest. I	2
(24 hrs/week)	6	HLCED 523: Communication I	2	NUTRI 581: Tech. Nutr. Res.	2
		Electives <sup>2</sup> /Selectives <sup>3</sup>	3	Electives	3
	<u>15</u>		<u>14</u>		<u>14</u>
<b>WINTER</b>					
BIOCH 462: Biochemistry II	6	BIOCH 462: Biochemistry II	6	BIOCH 462: Biochemistry II	6
HSMGT 574: Intro. to Health		PPHYS 552: Nutri. Patho-		PPHYS 552: Nutri. Patho-	
Care Management	2	physiology I	3	physiology I	3
NUTRI 504: Dietetics II	2	NUTRI 566: Seminar II	1	NUTRI 566: Seminar II	1
NUTRI 512: Practicum		HLCED 584: Clin. Invest. II	2	HLCED 584: Clin. Invest. II	2
(24 hrs/week)	6	HSMGT 574: Intro. to Health		NUTRI 525: Adv. Mineral	
		Care MGT	2	Metabolism	2
		Electives <sup>2</sup> /Selectives <sup>3</sup>	3	Electives	3
	<u>16</u>		<u>17</u>		<u>17</u>
<b>SPRING</b>					
BIOCH 463: Biochemistry III	3	BIOCH 463: Biochemistry III	3	PPHYS 553: Nutri. Patho-	
NUTRI 576: Interrelationships		PPHYS 553: Nutri. Patho-		physiology II	3
of Health & Disease I	3	physiology II	3	NUTRI 567: Seminar III	1
HLCED 583: Clin. Invest. I	2	NUTRI 567: Seminar III	1	NUTRI 526: Adv. Vitamin	
NUTRI 505: Dietetics III	1	Electives <sup>2</sup> /Selectives <sup>3</sup>	7	Metabolism	1
NUTRI 513: Practicum				NUTRI 527: Adv. Protein	
(20 hrs/week)	5			Metabolism	3
				Selectives <sup>3</sup>	2
				Electives	4
	<u>14</u>		<u>14</u>		<u>14</u>
<b>SUMMER</b>					
HLCED 524: Communication II	2	HLCED 524: Communication II	2	NUTRI 528: Adv. Carbo. &	
NUTRI 571: Management in		NUTRI 515: Clinical Practice	4	Lipid Metab.	4
Clin. Dietetics <sup>1</sup>	2	NUTRI 571: Management in		Selectives <sup>3</sup>	2
NUTRI 577: Interrelationships of		Clin. Dietetics	2		
Health & Diseases II	3	NUTRI 585: Research		NUTRI 585: Research Problem	3
HLCED 584: Clin. Invest. II	2	Problem	3	NUTRI 595: Special Project	3
NUTRI 514: Practicum		Electives <sup>2</sup> /Selectives <sup>3</sup>	3	Electives	2
(20 hrs/week)	5				
				or	
				NUTRI 586: Research Problem	8
	<u>14</u>		<u>14</u>		<u>14</u>
<b>FALL</b>					
NUTRI 510: Current					
Professional Issues	2				
NUTRI 515: Practicum					
(36 hrs/week for 4 weeks)	3				
NUTRI 585: Research Problem	3				
Selectives <sup>3</sup> and/or					
Electives	5				
	<u>13</u>				
TOTALS	<u><u>72</u></u>		<u><u>59</u></u>		<u><u>59</u></u>

1. NUTRI 571 will be completed by the end of the fifth week of the quarter.

2. Including at least 4 credit hours of advanced metabolism courses.

3. Selectives include courses numbered NUTRI 530 through NUTRI 549.

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### Method of Application

The application and acceptance procedure for Track I is different from the procedures for Tracks II and III.

#### Track I—Dietetic Internship/Master of Science Program

The completed application packet must be received on or before *March 1 for April notification of September enrollment.*

Application Packet must contain the following:

1. *Completed Application for Admission Form.*
2. *Letter of application* in applicant's own handwriting, to include both short and long-term professional goals.
3. *Completed Declaration on Intent Form* signed by authorized Plan IV Program Representative from applicant's school. *The Final Endorsement Form* is required for an applicant who has already graduated. This form is available at the applicant's school through the authorized Plan IV Program Representative.
4. *Check or money order* for \$25 (cash will not be accepted).
5. *Academic transcript* from each college or university attended. If applicant has already graduated, an official final transcript is required. It must bear the official school seal and include degree and date granted.
6. *Record of Medical History and Physical Examination* signed by a physician.
7. *Three letters of recommendation* from professional persons qualified to give pertinent information as to the ability and professional qualifications of the applicant. It is requested that one letter be from a nutrition faculty member and one from an institutional management faculty member. Recommendations must be written on forms provided by Rush University and returned under separate cover by each person writing the recommendation.
8. *Scores on the Graduate Record Examination* taken within the past three years.



Track II and Track III—  
Master of Science Program

The completed application packet must be submitted by April 1 for enrollment in the program for the Fall Quarter of the same year.

Application Packet must contain the following:

1. *Completed Application for Admission Form.*
2. *Supplementary Information Form* including professional goals and courses the student plans to take before matriculation.
3. *Check or money order* for \$25 (cash will not be accepted).
4. *Academic transcript* from each college or university attended. If applicant has graduated, an official final transcript is required. It must bear the official seal and include degree and date granted. If student has not graduated, evaluation will be based on courses completed when application is made. However, the official final transcript must be on file in the Registrar's Office before the end of the first quarter of enrollment.
5. *Three letters of recommendation* from professional persons qualified to give

pertinent information as to the ability and professional qualifications of the applicant. Letters must be from faculty, fellow workers or supervisors. Personal references are not acceptable. Recommendations must be written on forms provided by Rush University and returned under separate cover by each person writing the recommendation.

6. *Scores on the Graduate Record Examination* taken within the past three years.

It is important for each applicant to consider the options available to him/her in this comprehensive program and to select the program track most consistent with his/her qualifications and career goals. Assistance in making this judgement is available upon specific request.

Direct inquiries and application materials to:

Coordinator of Admissions  
Section of Clinical Nutrition  
Department of Related Health  
Programs  
1753 West Congress Parkway  
Chicago, Illinois 60612  
(312) 942-2111







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## Section of Medical Technology

Bachelor of Science (B.S.) in Medical Technology

Marjorie Stumpe, MT (ASCP), M.A., Director

Herb Miller, MT (ASCP), M.H.S., Assistant Director

John Gruhn, M.D., Medical Director

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### Faculty

Gewurz, A.

Kachmar, J.  
Kaplan, R.

Maedel, L.  
Miller, H.

Siegel, J.  
Stumpe, M.

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### Teaching Assistants:

Barrett, J.  
Belkerman, A.  
Detweiler, G.  
Gvazdinskas, L.

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### Educational Activities

The Bachelor of Science Degree Program in Medical Technology requires successful completion of the pre-health curriculum and the upper division study at Rush University. A student enrolled at an affiliated college for the Rush program will file appropriate forms with the College of Health Sciences to formalize participation in the program. The student's academic program will be monitored by both Rush and the health careers advisor of the affiliated college. Admission into the program is competitive and only the most qualified applicants will be accepted. All candidates for admission must provide evidence of good physical and mental health. Students meeting the objectives of the pre-health curriculum and obtaining the approval of the affiliated college health careers advisor will be considered for admission into the program.

**Transfer Applicants.** The College of Health Sciences also considers a limited number of transfer applicants who have satisfactorily completed the pre-health curriculum at an accredited college or university. Rush University does not offer the pre-health curriculum on its campus. No transfer credit is awarded for required course work in which the student earned less than a "C" grade or its equivalent. Required courses should be taken for a grade rather than a pass-fail option. Selection is competitive, and only the most qualified applicants will be accepted.

Transfer applicants apply directly to the College of Health Sciences. It is advisable to apply early in the academic year preceding the intended year of matriculation. Guidance in course selection is available through the Admissions Office at Rush.

Applications for transfer students may be obtained from:

Coordinator of Admissions  
Section of Medical Technology  
Dept. of Related Health Programs  
Rush University  
1743 West Harrison Street  
Chicago, Illinois 60612  
(312) 942-2111

The application should be accompanied by a \$25 non-refundable application fee, all college and university transcripts, and three recommendations. A personal interview is also required as part of the application process.

Applicants whose first language is not English, must take the Test of English as a Foreign Language (TOEFL), administered by the Educational Testing Service in some 95 foreign centers. Applications for the TOEFL Examination may be obtained from the Educational Testing Service, Box 995, Princeton, New Jersey 08540.

When the application is complete, all items are reviewed and evaluated. If required course work is still in progress, an offer of acceptance is contingent upon satisfactory completion.



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### **Philosophy**

The contribution of medical technology to the patient and to the health care delivery system is primarily one of diagnostic services. As clinical medicine expands in the variety and number of diagnostic tests performed, and as new methodologies and instruments become increasingly sophisticated, there is a crucial need for more high-quality professionals—not merely more technologists. Today's professional technologists must not only develop technical expertise, but teaching and administrative competence as well. They must be able to adapt to rapid changes in the field while maintaining an optimal level of performance. As members of the health care team, medical

technologists must have a basic understanding of the role of other health practitioners in order to function effectively and bring the best possible care to the individual and the community. Although the work in medical technology often does not place the practitioner in actual physical proximity to the patient, the technologist, nevertheless, must maintain a high degree of compassion and empathy and a constant awareness that the welfare of the patient is the ultimate goal.

It is the aim of the Rush University Baccalaureate Program in Medical Technology to educate technologists to meet the changing needs of laboratory medicine more effectively and with greater efficiency.

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### **Objectives**

The objectives of the program in medical technology are to provide educational experiences which will enable the student to:

- acquire knowledge and proficiency in the technical skills required in the medical technology profession;
- develop problem-solving abilities in the application of scientific theory to the clinical practice of medical technology;
- acquire the basic principles of management to assist in the supervision of medical technologists and other supportive

level laboratory personnel;

- appreciate the importance of continuing education as an avenue of professional growth;
- acquire an understanding of the roles of other members of the health care team and an ability to function cooperatively within the team;
- appreciate and practice professional ethics in providing quality health care to the patient and to the community.

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### **Pre-Health Curriculum**

The pre-health portion of the medical technology program is taken at an affiliated college or other accredited college or university and requires two or three years of study, depending upon the college. These years are devoted to preparing the scientific founda-

tion upon which the practice of medical technology can be built. The first year emphasizes courses in biological, physical, and behavioral sciences, with options in the humanities. The succeeding pre-health years

are used to increase depth in the sciences as they relate more specifically to health fields and to enhance personal experience by a broad choice of electives in the humanities.

Each affiliated college has a unique participation with Rush. Specific course offerings and requirements may vary from campus to campus due to curriculum offerings, scheduling, and course content. Each pre-health curriculum is different, but all provide the background necessary for the professional component of the program in the final two years. The following listing suggests the kinds of courses that normally are required before a student comes to the Rush campus.

**Pre-Health Curriculum**

Courses	Quarter Hours	Semester Hours
Chemistry, Inorganic	10-12	8
Quantitative Analysis	5-6	4
Chemistry, Organic	5-6	4
Human Anatomy and Physiology	10-12	8
Microbiology	5-6	4
Statistics, Introductory	4	3
Behavioral Sciences (Psychology, Sociology, or Anthropology)	18	12
Academic Electives	33-26	17
Total	90	60

**Upper Division Studies**

Following the pre-health curriculum, upper division studies are devoted to completing the professional segment of the program leading to the bachelor of science degree with a major in medical technology.

The comprehensive technical curriculum at Rush University prepares the student to enter the practice of medical technology. Each graduate is eligible to take the National Certifying Examination given by the American Society of Clinical Pathologists, and upon passing the examination becomes certified as a Medical Technologist, MT(ASCP). Graduates are eligible to take any of the other national certifying examinations if they so desire. The program is accredited by the American Medical Associ-

ation's Committee on Allied Health Education and Accreditation (CAHEA).

In the junior and senior years the student integrates the theory of clinical medicine with the practice of clinical laboratory procedures, learning basic theory and skills in hematology, clinical chemistry, immunology, and clinical microbiology in the junior year; going on to more advanced courses in those areas in the senior year. Senior students apply basic concepts as they rotate through the laboratories of Presbyterian-St. Luke's Hospital and other affiliated institutions. In addition, students are prepared to fill supervisory and teaching positions through courses in management.



## Medical Technology Curriculum

### Junior Year

#### Fall Quarter

MEDTK 305 Patient Care Techniques	2
BIOCH 301 Biochemistry	4
MEDTK 304 Basic Laboratory Skills	5
IMMUN 301 Immunology	3
	14

#### Winter Quarter

MICRO 311 Diagnostic Microbiology	5
BIOCH 411 Clinical Chemistry I	3
IMMUN 403 Clinical Serology	3
IMMUN 421 Immuno Hematology	3
	14

#### Spring Quarter

MICRO 411 Parasitology, Mycology & Virology	5
HEM 301 Hematology I	5
BIOCH 412 Clinical Chemistry II	3
MEDTK 303 Body Fluid Analysis	4
	17

Subtotal

Pre-Health Curriculum

Total

92

90

182

\*Courses may not always be offered in sequence listed.

\*All courses are required courses.

### Senior Year

#### Fall Quarter

HEM 425 Hematology II	2
IMMUN 402 Clinical Immunology	2
MEDTK 421 Practicum in Clinical Chemistry	8
MEDTK 423 Practicum in Immunology	4
	16

#### Winter Quarter

HEM 426 Hematology III	2
BIOCH 413 Clinical Chemistry III	2
MEDTK 422 Practicum in Hematology	8
MEDTK 425 Practicum in Immunohematology	4
	16

#### Spring Quarter

BIOCH 414 Clinical Chemistry IV	2
MEDTK 441 Seminar in Medical Technology	2
HCADM 301 Health Care Management	3
MEDTK 424 Practicum in Microbiology	8
	15

## Service Activities

Most faculty members are actively involved in the clinical laboratories of Rush-Presbyterian-St. Luke's Medical Center, maintaining active research or clinical positions in their areas of specialty. Several faculty members hold joint appointments

in Rush Medical College. Program faculty and resources span the gamut of clinical laboratory medicine and, therefore, actively support and participate in all areas where technical laboratory application is involved.

## Research Activities

Faculty for this program also engage in research, either technical or educational in nature. A listing of research projects follows:

Title: Evaluative Studies for Clinical Practice.

Investigators: Stumpe, M. and Miller, H.  
Status: Continuing  
Support: Departmental

Title: MLT-MT Articulation Programs.  
Investigators: Miller, H. and Stumpe, M.  
Status: Continuing  
Support: Departmental

Title: Admission Criteria Study.  
Investigators: Miller, H. and Stumpe, M.  
Status: Completed

Title: Application of the PLATO System to the Medical Technology Curriculum.

Investigator: Stumpe, M.

Status: Continuing

Support: Departmental

Title: Job Role Satisfaction

Investigators: Miller, H. and Stumpe, M.

Status: Started 1980

Support: Departmental

Title: Use of Leucocyte Transketolase as an Indicator of Thiamine status.

Investigators: Narins, P. and Stumpe, M.

Status: Continuing

Support: Departmental







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# Section of Occupational Therapy

Master of Science (M.S.) in Occupational Therapy with Sensory Integration Specialty

Cynthia J. Hughes, M.Ed., Director

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## Faculty

Bell, V.  
Brady, C.  
Druker, R.  
Hughes, C.

Maczulski, J.  
Mansfield, M.  
McCauley, R.

Novak, E.  
Opacich, K.  
Schroeder, C.

Stallings, S.  
Strahle, D.  
Walens, D.  
Wolfe, C.

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## Educational Activities

The Section of Occupational Therapy provides professional training for experienced registered occupational therapists in sensory integration, a specialized approach within occupational therapy. The program prepares the therapist to return to the professional community to practice the skills of occupational therapy and base that practice on a fuller understanding of the foundations and principles of sensory integration, and to engage in research and educational activities to further enhance the theory and practice of sensory integration.

The section offers a four-quarter program leading to the Master of Science Degree in Occupational Therapy. The course of study also provides the basis for certification by the

Center for the Study of Sensory Integrative Dysfunction. The program is one of the few in the United States which offers intensive study in the area of sensory integration and the only one which offers sensory integration as the major area of emphasis. Faculty members within the Section of Occupational Therapy are involved in teaching and supervisory responsibilities for the Master of Science Degree Program in the College of Health Sciences. In addition, faculty members are involved in integrating the theoretical and clinical aspects of occupational therapy through the implementation of sensory integration programs with diagnostic and development groups in the various occupational therapy units of the Medical Center.

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## Philosophy

*Educational Orientation:* The master's degree program in occupational therapy emphasizes the educational approach which interfaces occupational therapy and didactic material with clinical instruction and practice. The purpose of this educational philosophy is to allow the student maximum opportunity for the highest levels of integration of content and understanding of the rationale for instruction. This philosophy is fostered through such current sequencing of theory and clinically-based experience that the student is able to relate to either or both environments depending upon which best facilitates the learning process. The early and continuous collaboration between the theoretical and the clinical learning environments allows for the development of a collegiality between faculty and students. Through such a relationship the student's personal growth and opportunities for independent thinking is facilitated. Since the program is concerned with the student as an individual, the relationship with faculty provides the student with a variety of individualized learning options and experiences within diversified work environments.

*Professional Orientation:* The foundation upon which this specialized degree program is based are those principles and concepts of the neurosciences which are encompassed in the practice of sensory integrative therapy. Although occupational therapy relies on several different theoretical constructs, it is felt that at this advanced level of professional education, the neuroscientific approach is more suitable to facilitating the acquisition of a sound base in sensory integration. The sensory integration focus of the program, while neurological in perspective, is also rooted in the fundamental premise of occupational therapy: the client viewed as a whole functioning person can best be treated through the use of therapeutic activity. The basic assumption of this program is that activity is an integral part of an individual's life and that successful involvement in activity relies on man's sensory integrative mechanisms and their neurological foundations.

The graduate program allows the student to practice and integrate neurological/sensory integration principles and the fundamental premise of occupational therapy within the framework of the basic roles of



the therapist: practitioner, researcher, and educator. The graduate of this program is, above all else, a practitioner who is able to incorporate the techniques of sensory integrative treatment into the ongoing practice of occupational therapy. Since research and education are important to the process of graduate education and are also major professional needs, the roles of researcher and educator are vital components of the practitioner role.

*Specialized Orientation:* The program covers a specific range of topics leading to specialized competence in the area of sensory integration. The program focuses on the person

throughout the entire life span with emphasis on developmental dysfunction at the varied stages. The academic progression of the program produces a graduate who is proficient in sensory integrative therapy based on an in-depth understanding of the theory and application of the neurological functioning of the person and the ability to assess deficits and treat the manifested dysfunctions. The graduate is unique in that he/she is qualified to look not only at infancy and childhood dysfunctions, but also at the sensory integrative deficits of adolescent, adult, and geriatric populations.

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### **Program Objectives**

Upon completion of the academic program within the Section of Occupational Therapy, the student will be able to:

- contribute to the growth and development of the profession of occupational therapy as a result of having engaged in an in-depth study of a particular aspect of the field;
- integrate and apply sensory integration principles in conjunction with the fundamental principles of occupational therapy within the framework of practitioner, researcher, and educator;
- synthesize sensory integration principles and concepts and apply them in the assessment/treatment/management of a broad spectrum of deficits and dysfunctions seen in occupational therapy;
- plan and implement activities to monitor success or make modifications in management procedures designed to aid clients with sensory integrative deficits;
- explore areas for continued professional growth and research in order to more adequately serve those with sensory integrative deficits;
- relate the principles and concepts of sensory integration to the process of educating others about the nature and purpose of sensory integrative therapy.

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### **Prerequisites**

Applicants to the graduate program should have completed a baccalaureate degree in occupational therapy from an accredited institution and be registered by the American Occupational Therapy Association. A minimum of two years experience as a practicing occupational therapist is required prior to admission. Undergraduate transcripts should reflect a 3.0 grade point average (on a scale of 4.0 = A). All applicants are to complete the Graduate Record Examination. In

addition, one course in basic statistics, with a final grade of B or better, is a prerequisite for admission to the program.

Also, each applicant is to have experience with a pediatric population either through work experiences or some other related experience. If the applicant does not have this experience at the time of application, assistance will be given as to how the experience can be gained.

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### **Method of Application**

Applications and recommendation forms may be obtained by writing:

Coordinator of Admissions  
Section of Occupational Therapy

Department of Related Health Programs  
Rush University  
1753 West Congress Parkway  
Chicago, Illinois 60612  
(312) 942-2111

## Occupational Therapy Curriculum

Fall Quarter	Quarter Hours
NEU 501: Introduction to Neuroscience	3
OCC 501: Sensory Integration Assessment	3
HLCED 583: Clinical Investigation I	2
OCC 531: Education Seminar	2
OCC 511: Practicum	2
	12
<b>Winter Quarter</b>	
NEU 521: Neurophysiology I	3
OCC 502: Sensory Integration: Theory and Application I	3
OCC 541: Related Assessment and Evaluation	3
HLCED 584: Clinical Investigation II	2
OCC 512: Practicum	3
	14

Spring Quarter	
NEU 522: Neurophysiology II	3
OCC 503: Sensory Integration: Theory and Application II	3
OCC 581: Research Implementation	3
OCC 521: Occupational Therapy Theory I	2
OCC 513: Practicum	2
OCC 599: Independent Study or Elective	3
	16
<b>Summer Quarter</b>	
NEU 503: Neuropsychology	3
OCC 504: Sensory Integration: Theory and Application III	3
OCC 522: Occupational Therapy Theory II	2
OCC 514: Practicum	3
OCC 599: Independent Study or Elective	3
	14

Total required courses = 50 hours

Electives or Independent Study = 6 hours

Minimum required for graduation = 56 hours

## Research Activities

Members of the section are increasingly involved in determining the possibilities for research in sensory integration. Several faculty are currently involved in conducting studies on the assessment of sensory integrative deficits and the application of sensory integrative techniques to various populations. Another collaborative study between therapists from several clinical units focuses on vestibular functioning of normal adult popu-

lations, as determined by postrotatory nystagmus data, preliminary to hypotheses concerning dysfunctional groups. One faculty member is involved in a normative study of the motor planning abilities of children ages 9-18. In addition to the research related to sensory integration, other faculty are involved in projects related to other aspects of their client population such as swallowing dysfunction and hand rehabilitation.

## Service Activities

Members of the Section of Occupational Therapy provide a full range of assessment and therapeutic services for a variety of diagnostic and developmental populations. Occupational therapy services cover: acute and chronic psychiatry, both in and out-patient; pediatrics, including neonatology, developmental disorders, behavioral and emotional

disorders, and learning disabilities; adult physical rehabilitation; geriatrics; and alcohol intervention programs. There are several sub-units within each of these areas, and within each unit, therapists utilize sensory integrative treatment approaches when it is considered appropriate.





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## Section of Speech and Hearing Sciences

Master of Science (M.S.) in Speech/Language Pathology Audiology

Master of Science (M.S.) in Audiology

David L. Ratusnik, Ph.D., Director

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### Faculty

Bacon, M.  
Berlow, S.  
Harsch, G.  
Kisiel, D.

Klodt, D.  
Klor, B.  
Krause, S.  
Milianti, F.

Ostreicher, H.  
Ratusnik, D.  
Robinson, J.

Schewitz, S.  
Stoioff, M.

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### Educational Activities

The Section of Speech and Hearing Sciences provides professional training in speech-language pathology and audiology. The section offers a seven-quarter program leading to the Master of Science degree in (1) speech-language pathology or (2) audiology. The course of study also provides the basis for certification by the American Speech-Language-Hearing Association (ASHA). The program is one of the few in the United States which bases its education of speech

pathologists and audiologists on the facilities and opportunities offered by an academic medical center. In addition to teaching and supervisory responsibilities for the Master of Science degree programs in the College of Health Sciences, faculty members cross college lines, involving themselves in articulating the practical and service-related aspects of communicative disorders through resident, clerkship, and in-service programs in Presbyterian-St. Luke's Hospital.

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### Philosophy

The basic tenet of the faculty in the Section of Speech and Hearing Sciences is that the professional education of speech pathologists and audiologists, who look to practice in hospitals or other health care facilities, is optimized by drawing upon patients, staff and the physical resources of an academic medical center. In contrast to many professional training programs, the clinical skills of Rush students are fostered, grow and mature via observation and supervision by teacher/practitioners. All faculty are ASHA certified and participate fully in the clinical process, serving patients presenting a full range of

communicative disorders. In addition to close clinical supervision which provides the necessary foundation for clinical education, the faculty has developed a curriculum intended to meet ASHA standards. This is supplemented by the expertise of physicians, scientists, and other health care personnel within the Medical Center. Additionally, the faculty's commitment to research and the belief that an appreciation of scientific matters is valuable to the clinical process and professional growth, provide the basis for master's thesis research in the program.

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### Service Activities

Speech pathologists and audiologists in the Section of Speech and Hearing Sciences provide a full range of diagnostic and therapeutic services for the communicatively impaired through the Section of Communicative Disorders, Department of Otolaryngology and Bronchoesophagology. Staff members have demonstrated considerable expertise in developing specialized evaluative and treatment programs for the communicatively handicapped.

In conjunction with the Head and Neck Cancer Program, techniques have been developed for improvement of speech, voice and swallowing. New procedures for

auditory evoked potential testing and electrocochleography have been valuable in the assessment of hard-to-test individuals, in ruling out acoustic neuromas, and in the detection of brainstem lesions. Electromyographic biofeedback has been applied to hyperfunctional voice and stuttering impairments. Other service programs include electronystagmography, spectrographic voice evaluations, comprehensive management of right CVA patients, neonatal hearing testing, and videofluoroscopic evaluation of speech, swallowing and resonance problems. Patient referrals are made from a broad base of health care providers.



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## Research Activities

Members of the section are actively involved in basic and applied research concerning hearing, speech, voice and language with numerous clinical populations. Publication and presentation at major national and international conferences are fostered. Studies are conducted both independently and in collaboration with faculty from departments and services within the hospital and the colleges of the Medical Center.

### *Research Projects (1980)*

Title: Brainstem Auditory Evoked Potentials in Difficult-to-Test Patients.

An O.R. Procedure.

Investigators: Block, L. and Klodd, D.

Status: Started 1979

Support: Departmental

Title: Redefinition of Risk in High-Risk Infants Using Repeated Psychophysiological, Audiological, and Behavioral Assessments.

Investigators: Nelson, M., Klodd, D., Meier, W., and Campanella, R.

Status: Started 1979

Support: Departmental

Title: Special Amplification for the Mentally Retarded: A Helmet-Mounted Hearing Aid

Investigators: Klodd, D., Block, D., Higenbotham, J. (Misericordia), and Griffing, T. (Rexton-Argosy, Inc.)

Status: Started 1979

Support: Departmental

Title: Effect of Postoperative Irradiation on the Development of Alaryngeal Voice.

Investigators: Bacon, M. J., Logemann, J. A. (Northwestern University Medical Center), and Fabiszak, A. J. (University of Illinois Medical Center)

Status: Started 1980

Support: Department of Health, Education and Welfare, National Cancer Institute: Illinois Cancer Council (Comprehensive Network Demonstration Project)

Title: Central Vestibular Function in Multiple Sclerosis.

Investigators: Klodd, D., Harsch, G., Robinson, J., Meyer, D., Davis, F., and Stefoski, D.

Status: Continuing

Support: Departmental

Title: Effects on Voice of Laryngeal Irradiation with and without Vocal Counseling.

Investigators: Bacon, M. and Hendrickson, F.

Status: Continuing

Support: Departmental

Title: The Clinical Value of Bone Conducting Hearing Aids

Investigators: Klodd, D. and Edgerton, B. (E.A.R. Research Institute)

Status: Continuing

Support: Departmental

Title: Diagnostic and Therapeutic Techniques for Patients with Right CVA.

Investigators: Ostreicher, H. J. and Kelly, M.

Status: Continuing

Support: Departmental

Title: Cerebral Decline in Aging: Neurolinguistic Features

Investigators: Fox, J., Kaszniak, A., and Ratusnik, D.

Status: Continuing

Support: Department of Health, Education, and Welfare, National Institute on Aging

Title: Comparison of Crib-O-Gram and Conventional Behavioral Screening with High-Risk Neonates.

Investigators: Meyer, D. and Harsch, G.

Status: Completed

Support: Departmental

Title: Development and Standardization of the Measurement of Language Development: An Accountability Task for the Language Clinician.

Investigator: Ratusnik, D.

Status: Completed

Support: Department of Health, Education, Welfare, Office of Education, Bureau of Education for the Handicapped

Title: Methodologic Comparisons of Nystagmodial Computation.

Investigators: Robinson, J., Klodd, D., Harsch, G., Davis, F., and Stefoski, D.

Status: Continuing

Support: Departmental

Title: Speech and Voice of the Alaryngeal Patient Before and After Voice Restoration Surgery.

Investigators: Bacon, M. J., Wolfe, V., Holinger, L., and Hutchinson, J.

Status: Continuing

Support: Departmental

#### *Papers Published*

Ratusnik, D., Klee, T., Ratusnik, C.: Northwestern syntax screening test: A

short form. *J Speech Hear Disord* 45:200-208, 1980.

Ratusnik, D., Lascoe, D., Herbon, M., Wolfe, V.: Group language stimulation for patients with senile dementia. *Aphasia-Apraxia-Agnosia*. I(4):14-29, 1979.

Wolfe, V., Ratusnik, D., Feldman, H.: Acoustic and perceptual comparison of chronic and incipient spastic dysphonia. *Laryngoscope* LXXXIX:1478-1486, 1979.

#### *Abstracts Published*

Wolfe, V.: Vocal symptomatology in postpolypectomy dysphonia. *ASHA* 20:763, 1979.

Wolfe, V.: Spectrographic analysis in the management of voice disorders, *ASHA* 20:759, 1979.

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#### **Prerequisites**

Applicants to the graduate program should have completed a baccalaureate degree from an accredited institution in either communicative disorders, speech pathology, audiology or special education. Transcripts should reflect a strong record in the following course work: introduction to psychology, child psychology, statistics, phonetics, language acquisition or linguistics, acoustics or

the science of sound, anatomy and physiology of the speech and hearing mechanism. Applicants should have participated in the management of cases presenting a range of communicative disorders for 50-100 contact hours. Students considering public school placements should complete course work and practicum to this end at their undergraduate institutions.



### Speech-Language Pathology Curriculum

Year I		Year II	
Fall		Fall	
SHS 503 Intro. to Neurosciences	3	SHS 501 Speech and Hearing Sciences	4
SHS 561 Articulation	4	SHS 566 Ped. Neuro. Dis.	3
SHS 521 Child Language I	3	SHS 593 Seminar: Speech	3
SHS 505 Audiology I	3	SHS 515 Practicum	3
SHS 511 Practicum	3		
	16		13
Winter		Winter	
SHS 551 Diagnostics	4	SHS 533 Aural Rehabilitation	4
SHS 540 Anatomy and Physiology: Vocal Mechanisms	4	SHS 590 External Practicum	10
SHS 563 Voice Disorders	3	Elective	3
SHS 512 Practicum	3		
	14		17
Spring		Spring	
SHS 565 Motor Speech Disorders	3	SHS 590 External Practicum	10
SHS 581 Intro. to Graduate Research	3	Electives	6
SHS 522 Child Language II	3		
SHS 513 Practicum	3		
	12		16
Summer			
SHS 524 Stuttering	3		
SHS 562 Cranio-Facial Anomalies	3		
SHS 564 Aphasia	3		
SHS 514 Practicum	3		
	12		
Total Year I and Year II		100	

### Audiology Curriculum

Year I		Year II	
Fall		Fall	
SHS 541 Anatomy and Physiology: Hearing Mechanism	3	SHS 501 Speech and Hearing Sciences	4
SHS 503 Intro. to Neurosciences	3	SHS 592 Seminar: Audiology	3
SHS 505 Audiology I	3	SHS 520 Practicum	3
SHS 516 Practicum	3	Elective	3
	12		13
Winter		Winter	
SHS 531 Amplification	3	SHS 533 Aural Rehabilitation	4
SHS 506 Audiology II	3	SHS 572 Psychoacoustics	4
SHS 517 Practicum	3	SHS 595 External Practicum	10
Elective	3		
	12		18
Spring		Spring	
SHS 581 Intro. to Graduate Research	3	SHS 595 External Practicum	10
SHS 543 Electrophys. Assessment	3	Electives	6
SHS 542 ENG	3		
SHS 518 Practicum	3		
SHS 522 Child Language II	3		
	15		16
Summer			
SHS 544 Child Audiology	3		
SHS 527 Total Communication	3		
SHS 526 Industrial Audiology	3		
SHS 519 Practicum	3		
	12		
Total Year I and Year II			99

### Method of Application

Applications and recommendation forms may be obtained by writing:

David L. Ratusnik, Ph.D.  
 Section of Speech/Hearing Sciences  
 Dept. of Related Health Programs  
 Rush University  
 1753 West Congress Parkway  
 Chicago, Illinois 60612  
 (312) 942-5332





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# Department of Religion and Health

Christian A. Hovde, Ph.D., D.D., The Bishop Anderson Chairperson  
Bernard Pennington, M. Div., Director, Clinical Pastoral Services

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## Faculty

Burck, R.  
Corrigan, J.

Fitchett, G.  
Hovde, C.

Pennington, R.

Wagner, W.

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## Educational Activities

The department provides humanistic and theological studies within the colleges, research in the area of religion and health, and an accredited program in clinical pastoral education (CPE) for pastoral personnel.

The Bishop Anderson Professorship has been established for teaching in Religion and Health. The Department of Religion and Health teaches primarily in the areas of thanatology, ethics, the relationship between religion and illness, and family dynamics. In addition, the department emphasizes the philosophy of medicine.

Accredited by the Association for Clinical Pastoral Education, the department offers basic, advanced, and supervisory education in pastoral care. This program is oriented to graduate theological students, pastors, members of religious orders, or other health personnel who are interested and involved in pastoral care and counseling in the midst of a health crisis. Under faculty supervision, students carry direct responsibilities for ministry within patient care areas on an ecumenical basis which includes a sensitivity to particular parochial practices. Students use clinical pastoral education in preparation for parish ministry, chaplaincy, teaching, pastoral counseling, or CPE supervision.

*Basic Clinical Pastoral Education.* An intensive 11-week introduction to pastoral care, basic CPE focuses on models of ministry and their effect in patient care. Viewing the patient as a partner in learning, students engage in theological reflection and use pastoral resources with patients and health personnel; they work toward a better understanding of the interface between theology and behavioral sciences in interpreting the

human condition. Students may be accepted for this course from any discipline or field of study. The course descriptions found at the back of this catalogue are built on the experience of teaching the materials for theological students. However, there is no inherent difficulty in incorporating non-theological students into the course.

*Advanced Clinical Pastoral Education.* Advanced CPE is a year-long residency program for persons who have already completed their basic theological degree, have had pastoral experience, and want a pastoral care specialization, such as certification as a chaplain through the College of Chaplains, American Protestant Hospital Association. Students function as pastoral members of interdisciplinary health teams to develop the capacity to utilize their pastoral perspectives and competence through a variety of pastoral encounters.

*Supervisory Clinical Pastoral Education.* Supervisory CPE is designed for qualified persons who have demonstrated pastoral professional competence, and who want to specialize in supervision in preparation for certification with the Association for Clinical Pastoral Education. Students are helped to develop both a theory and theology of pastoral practice, a philosophy of CPE that includes understanding appropriate educational models' theory and practice, and a versatility in using supervisory skills and methods.

The program of religion and health is currently being developed to enlarge upon existing course offerings for interdisciplinary and clinical experiences within the various colleges of the University.

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## Service Activities

The Department of Religion and Health is responsible for providing pastoral care to patients, their families or supporting persons, and the staff personnel who serve them within Rush-Presbyterian-St. Luke's Medical Center. The department provides round-the-clock religious ministry to patients in the

hospital, providing sacraments, church services, individual counseling, and grief ministry to any person who is in need of them. It is available to support members of the student body and staff and to respond to emergencies when needed.



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### Research Activities

Until recently, the department had been functioning as a service and training department and had not been actively engaged in research. Research is now being incorporated into the training of clinical pastoral education (CPE) theological students. Areas being investigated include: attitudinal changes to life crises following educational process; faith systems and their effect on mobilization of physical resources; religious symbolism and patient/family support systems; and acute grief behavior.

#### *Research Projects (1980)*

Title: Modification of Attitudes in Medical Personnel After Exposure to Formal Course Work in Death and Dying.  
Investigators: Hovde, C. A. and Staff  
Status: Continuing  
Support: Departmental; Bishop Anderson Foundation

Title: Acute Grief Behavior Survey.  
Investigators: Fitchett, G. and Staff  
Status: Continuing  
Support: Departmental

Title: Evaluating Competence in Psychosocial Care of the Terminally Ill Patient (formerly Measuring Outcomes in Death Education).  
Investigators: Fitchett, G. and Staff

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### Courses Offered

(For complete course descriptions see section on course offerings, page 97.)

RELH 453 Illness and Faith  
RELH 461 Living and Dying: An Introduction  
RELH 462 Death and Dying  
RELH 501 The Art of Healing  
RELH 611 Clinical Case Conference  
RELH 615 Sermon Preparation and Delivery

Status: Continuing  
Support: Departmental

Title: The Psychology of the Self and Clinical Pastoral Education.  
Investigators: Pennington, B., Fitchett, G., and Staff  
Status: Terminated  
Support: Departmental

Title: Physical and Physiological Parameters of Extended Limits of Mind/Body Coordination.  
Investigators: Sarnat, R. and Hovde, C.  
Status: Completed  
Support: Rush-Presbyterian-St. Luke's Medical Center, College of Medicine

#### *Papers Published:*

Burck, R.: Pastoral expressionism: The verbatim in the pastoral paradigm, J Superv Train Ministry 3:39-56, 1980.  
Fitchett, G.: The paradoxical nature of CPE. J Superv Train Ministry 3:57-71, 1980.

#### *Books, Book Chapters and Reviews*

Fitchett, G.: Review of: Medicine and the Reign of Technology. By S. J. Reiser. Cambridge, Cambridge University Press, 1978, 317 pp. J Relig Health 19: 158-159, 1980.

RELH 621 Personal and Professional Concerns  
RELH 623 Didactic Presentations  
RELH 650 Individual Supervision  
RELH 681 Guided Study or Research  
RELH 685 Clinical Practice  
RELH 689 Comprehensive Evaluations

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# Affiliated Colleges

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## Affiliated Colleges

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Students who seek entrance to the baccalaureate programs in nursing and medical technology at the College of Nursing and the College of Health Sciences apply directly to the affiliated colleges of their choice. Each college provides an excellent basis for the professional portion of the undergraduate programs at the Rush campus.

The participation of each affiliated college with Rush is unique. Carleton and Grinnell ask that students spend three years on their campuses before coming to Rush for the final two years. The other 12 schools require a minimum of two years academic residence. Several schools offer dual degrees—one from Rush with a major in nursing or medical technology, and one from the affiliated college in another major. Each campus specifies requirements for the second degree. Carleton and North Central College participate only in the undergraduate nursing program. Currently St. Olaf only participates with Rush in an experimental program which provides one month of inter-session residency at Rush for selected students from St. Olaf. During this period, students are exposed to an organized didactic and experiential program intended to inform them more fully concerning health careers.

The pre-health curriculum also varies from campus to campus because of scheduling,

curricular offerings and course descriptions. For specifics about each college it is best to check with the admissions office or health careers advisor on the campus. The affiliated colleges are:

Beloit College  
Carleton College  
The Colorado College  
Cornell College  
Fisk University  
Grinnell College  
Illinois Institute of Technology  
Knox College  
Lake Forest College  
Lawrence University  
Macalester College  
Monmouth College  
North Central College  
Ripon College

Although the colleges are characterized by their own styles, traditions and programs, each is noted for its academic excellence and liberal arts tradition. The choice of where students spend the first years of undergraduate study is their decision. They may choose any one of the 14 affiliated colleges. Each is a port of entry to the baccalaureate programs of Rush University. The following brief descriptions of each of the colleges will help students make informed decisions.



## **Beloit College**

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Beloit, WI 53511  
(608) 365-3391 ext. 244

Enrollment 1980-81  
Total: 1,011  
Men: 548  
Women: 463

Calendar  
Semester Plan

Admissions Tests  
Required  
S.A.T. or A.C.T.

Admissions Interview  
Strongly encouraged,  
but not required

Costs 1981-82  
Total: \$7,780  
Tuition: \$5,730  
Room and Board: \$1,920  
Fees: \$130

---

Beloit College has been a strong liberal arts college since 1846, two years before Wisconsin became a state. It has maintained a tradition of academic excellence in both the sciences and the humanities.

The student-faculty ratio is 12 to 1; therefore, classes are generally small. All the science faculty hold Ph.D.'s, and department chairmen teach both introductory and advanced courses. The Science Center consists of Chamberlain Hall, a five-story laboratory-classroom building; Mayer Hall, an auditorium building; Kohler Science

Library; and Pierpont Wood Conservatory (Greenhouse). Special facilities include the Thompson Observatory with a 22-inch Celestron telescope, a particle accelerator designed and built by students and faculty, the new Hewlett-Packard 3000 Series 33 computer, and individual research laboratories for students pursuing undergraduate research. An off-campus area, Chamberlain Springs, is used for field work in the sciences.

In addition to using traditional classroom approaches, members of the science faculty have introduced laboratory sessions that allow students to investigate new problems in a real-life manner, collecting data to provide answers to those problems. Background courses are available in chemistry and mathematics for entering students who have insufficient preparation in those areas.

The college is located on a 65-acre oak and hickory studded campus in a community of 36,000 on the Wisconsin-Illinois border, surrounded by farmland and recreational areas. Beloit is 100 miles from Chicago, 75 miles from Milwaukee and 50 miles from Madison. Students from all over the United States and 19 foreign countries come to Beloit College for an education that produces a distinctive graduate.



**Carleton College**

Northfield, MN 55057  
(507) 663-4000 ext. 511

Enrollment 1980-81	Admissions Interview Recommended
Total: 1,854	
Men: 941	
Women: 913	
Calendar 3-3 Plan	Costs 1981-82
	Total: \$7,980
	Tuition and Fees: \$5,755
	Room and Board: \$2,225

Admissions Tests Required  
A.C.T. or S.A.T.

Admissions Tests Recommended  
S.A.T. English Comp. achievement test, and 2 other achievement tests

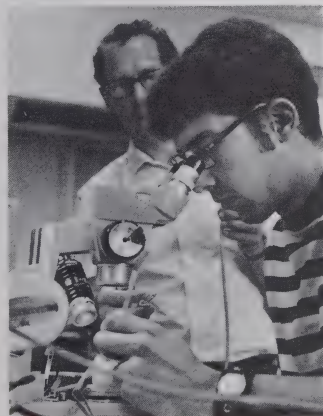
The definition of a Carleton education has over 1800 variations, as is evident in the broad selection of majors chosen by its some

1800 students, either from conventional fields of interest or planned on an individualized basis.

Diversity and individuality both in the student body and in academic programs are an integral part of the college's purpose. Just as no two entering students are alike, no two Carleton graduates fit into a particular mold. They all, however, have been exposed to a range of liberal arts disciplines and have learned to question dogma, value the scientific method, and sensitively and humanely make ethical decisions.

Carleton's 90-acre main campus, site of its fine science complex, music and drama center, library, and Lyman Lakes, is surrounded by nearly 900 acres of natural woodland and prairie that is utilized as an educational resource, as well as a recreation area.

Located in the southeastern Minnesota community of Northfield, a city of 10,000, Carleton is 40 miles south of Minneapolis and St. Paul and easily accessible by public transportation.





## **The Colorado College**

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Colorado Springs,  
CO 80903  
(303) 473-2233  
ext. 219, 220

Enrollment 1980-81  
Total: 1,919  
Men: 972  
Women: 947

Calendar  
Block Plan

Admissions Tests  
Required  
S.A.T. or A.C.T.

Admissions Interview  
Not required

Costs 1981-82  
Total: \$7,300  
Tuition and Fees: \$5,500  
Room and Board: \$1,800

---

Colorado College is an independent, coeducational, liberal arts college. It occupies a 79-acre campus in Colorado Springs, a city of 200,000 in a metropolitan area of more than 320,000. It is located at a point where the high western plains meet the Rocky Mountains. The surrounding area

offers a natural laboratory for many disciplines, as well as a variety of recreational activities.

The Colorado College Plan, started in 1970, is an exciting departure from the traditional academic calendar. Under the plan, the year is divided into nine three-and-one-half-week "blocks." Four-and-one-half-day block breaks between courses allow students time for non-academic pursuits. Most courses are completed in one block and a student takes only one course per block.

The block plan, as it is commonly known, has many advantages. It has reduced class size to an average of 15 students. It allows freedom in scheduling classes so that an astronomy class might meet at midnight, or a biology class can go into the field for a week. It also allows the college to attract distinguished visiting professors with ease, and it has contributed to greater involvement in the educational process on the part of the students.



## Cornell College

Mt. Vernon, IA 52314

1-800-553-8479 (toll-free from states bordering Iowa)

1-800-332-8839 (toll-free within Iowa)

1-319-895-8811 (from other states, call collect)

Enrollment 1980-81	Admissions Tests Required
Total: 933	S.A.T. or A.C.T.

Men: 488

Women: 445

Admissions Interview Recommended
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Calendar

One-Course-

At-A-Time

(September-May)

Costs 1981-82

Total: \$6,978

Tuition and Fees: \$5,112

Room and Board: \$1,866

*Its [Cornell's] science faculty is first rank... their teaching proceeds from research... but their professors put a lot more time and heart and brains into their teaching than the distinguished professors at our great 'research' universities.*

—Gerard Piel, publisher,  
*Scientific American*, 1975

Nearly 70 percent of Cornell's students majoring in science over the last 17 years entered graduate programs in health careers or the physical sciences. In the past five years, Cornell has earned a 68 percent success rate in medical school placements, and has recently been invited by the University of Iowa to join a cooperative program in hospital and health administration.

The Cornell One-Course-at-a-Time

Plan provides an efficient, result-oriented approach to scientific studies. Students take a single course at a time: classes last three and one-half weeks, followed by a four-day weekend. Free from the tug-of-war of competing course demands, you can concentrate your best efforts on each course.

And since you take only one course each term, there's flexibility in class scheduling. Laboratories may be arranged to illustrate course material as you cover it. You may find yourself "in class" at the biology field station, at a commercial laboratory, clinic, or hospital, or even in the Bahamas in January.

Cornell's position at the vanguard of undergraduate science education was bolstered recently by the addition of the \$2 million West Center for Biology and Chemistry, which provides Cornell students with state-of-the-art laboratory, classroom, and library facilities.

But the strength of the sciences at Cornell lies in a talented and dedicated teaching faculty, all Ph.D.s. Teaching is their highest priority, yet the faculty are well represented in research and publishing fields, and apply themselves to Cornell and ACM off-campus programs as well.

Send your inquiries about Cornell sciences and One-Course-at-a-Time to the Office of Admissions, Wade House, at the address listed above; or call Cornell's toll-free numbers.





## Fisk University

Nashville, TN 37203  
(615) 329-8665

Enrollment 1980-81  
Total: 992  
Men: 321  
Women: 671

Calendar  
Semester

Admissions Tests  
Recommended  
S.A.T. or A.C.T.

Admissions Interview  
Not required

Costs 1981-82  
Total: \$6,965  
Tuition and Fees: \$4,880  
Room and Board: \$2,085

Fisk University is a private institution whose main purpose is to provide undergraduate education of excellence. Through a well-planned program involving both undergraduate and graduate education, the University aims to develop among its students a broad understanding of the basic principles and values in the humanities and fine arts, the natural sciences and mathematics, and the social sciences. The ultimate goal is to equip each student for intellectual and social leadership in the modern world.

Learning at Fisk University is a dynamic living experience. The university presents

numerous socially-oriented programs through an interdisciplinary approach to higher education. At Fisk, black studies become part of a balanced intracurricular program.

Fisk is located on a 40-acre campus near the downtown area of Nashville, Tennessee. It offers programs leading to bachelor's and master's degrees in 19 major areas of study.

The traditional excellence of Fisk's programs and its students is evidenced by the fact that in 1930, Fisk became the first black college to receive full accreditation by the Southern Association of Colleges and Schools. In 1952, the school established a chapter of the Phi Beta Kappa Honor Society. In 1975, Fisk became the first predominantly black institution to have a national chapter of Mortar Board. Other national academic societies, as well as major black national sororities and fraternities, have chapters on the Fisk campus.

For sports enthusiasts, complete outdoor sports and recreation facilities, including athletic fields and tennis courts, are available. A municipal golf course is nearby. Fisk students have the opportunity to participate regularly in intercollegiate sports competition.



## Grinnell College

Grinnell, IA 50112  
(515) 236-6181

Enrollment 1980-81  
Total: 1,225  
Men: 681  
Women: 544

Calendar  
Semester Plan

Admissions Tests  
Recommended  
S.A.T. or A.C.T.

Admissions Interview  
Not required

Costs 1981-82  
Total: \$7,715  
Tuition and Fees: \$5,950  
Room and Board: \$1,765

Grinnell is a private, coeducational, liberal arts college that enrolls students from all parts of the United States and from many foreign countries. Life on the Grinnell campus is informal and individualistic.

Grinnell stresses an integration of private and public responsibility: the first with its attributes of self-knowledge, self-reliance, and intellectual discipline; the second with its qualities of social conscience and concern for public welfare.

Grinnell offers courses of study in the humanities, sciences, social studies, elementary and secondary education, physical education, and other programs. A faculty-student ratio of 1 to 11 permits ample opportunity for independent study, including the Freshman Tutorial Program, guided reading, special projects, and advanced group study.

The attractively landscaped 90-acre campus in a small central Iowa city has 35 buildings, including residence halls. Among recreational facilities is the large, multiple-use physical education complex.





## Illinois Institute of Technology

Chicago, Illinois 60616  
(312) 567-3025 (from other states, call collect)  
1-800-572-1587 (Illinois residents, call toll-free)

Enrollment 1980-81  
Total: 7,254  
Men: 5,711  
Women: 1,543

Calendar  
Semester Plan

Admissions Tests  
Required  
S.A.T. or A.C.T.

Admissions Interview  
Recommended

Costs 1981-82  
Total: \$7,346  
Tuition: \$4,970  
Room and Board: \$2,376

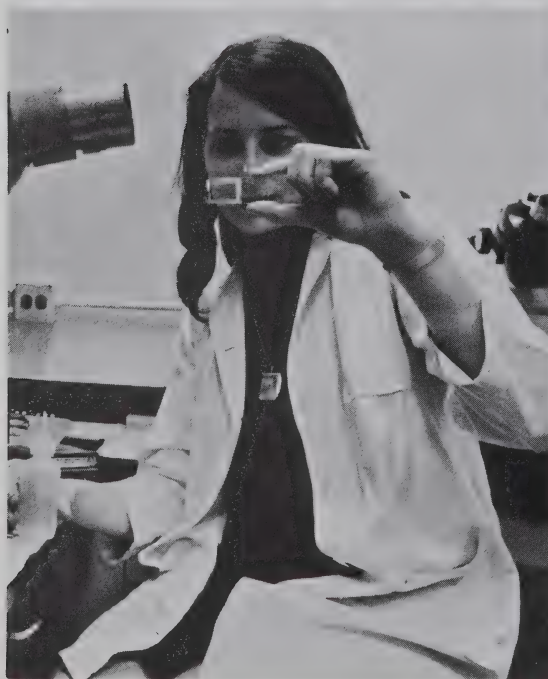
Illinois Institute of Technology is a medium-sized, private, coeducational university emphasizing preparation for professional careers in the sciences, engineering, the social and behavioral sciences, the humanities, architecture, planning, design, business administration, and law. It offers undergraduate and graduate degree programs through six schools and colleges on both a

full-time and part-time basis. In addition, excellent pre-professional programs are available to prepare students for postgraduate study in medicine, dentistry and law.

Because of IIT's scope and flexibility, students have the opportunity to investigate a broad range of disciplines, pursue specialized programs in non-traditional areas such as biomedical engineering and, with approval, to design individualized programs. In all areas, including biology, chemistry and physics, IIT excels on the undergraduate, graduate, and research levels.

The 120-acre IIT Center is located on the near south side of Chicago, approximately three miles from Rush University. Facilities include the IIT Research Institute, the Institute of Gas Technology, a shopping area, service station, gymnasium and recreation area, six dormitories, nine resident fraternity houses, and the student union.

Applications are welcome from all students who are earnestly interested in an education that prepares them for professional practice.



## Knox College

Galesburg, IL 61401  
(309) 343-0112

Enrollment 1980-81	Admissions Tests
Total: 991	Required
Men: 533	S.A.T. or A.C.T.
Women: 458	
Calendar	Admissions Interview
3-3-3 Plan	Strongly recommended
December Mini-term	Costs 1981-82
	Total \$7,700
	Tuition and Fees: \$5,630
	Room and Board: \$2,070

Knox College, founded in 1837, has for 143 years been dedicated to providing quality education for its students. The college occupies a 60-acre campus located two blocks from downtown Galesburg, a city of approximately 38,000.

The Knox year is divided into three ten-week sessions and one four-week session, the latter, an optional mini-term occurring between Thanksgiving and Christmas. During the mini-term, students are free to find work or to continue their studies.

In addition to the 2-2 Plan (two years at a liberal arts college, two years at Rush), Knox

has a 3-2 Plan, under which, upon completion of the program, students may earn a bachelor of arts degree from Knox and a bachelor of science degree from Rush.

For fall, 1980, 64 percent of the entering freshmen ranked in the upper 20 percent of their high school graduating classes. Of faculty members teaching in the 19 areas of study offering a major, 90 percent hold the Ph.D. degree. The student-faculty ratio at Knox is 11 to 1.

Knox-Rush students have something to say about their experience in the program.

Lisa Arthur (nursing) from Glencoe, Illinois: "I am planning to graduate from Knox College with a biology and Spanish major. Last year I studied in Barcelona, Spain, with Knox's program for junior year abroad."

Pam Wetterauer (medical technology), from Downers Grove, Illinois: "I combined mathematics and computer science with my chemistry major which will allow me to work with hospital and/or laboratory computers and instruments."

Henry Houser, Professor of Sociology, counsels all students interested in the programs. Dr. Houser's responsibility is indicative of the concern of the college for the success of the programs.





## Lake Forest College

Lake Forest, IL 60045  
(312) 234-3100 ext. 200

Enrollment 1980-81  
Total: 1,031  
Men: 531  
Women: 500

Calendar  
4-4 Plan

Admissions Tests  
Required  
S.A.T. or A.C.T.

Admissions Interview  
Encouraged, but not  
required

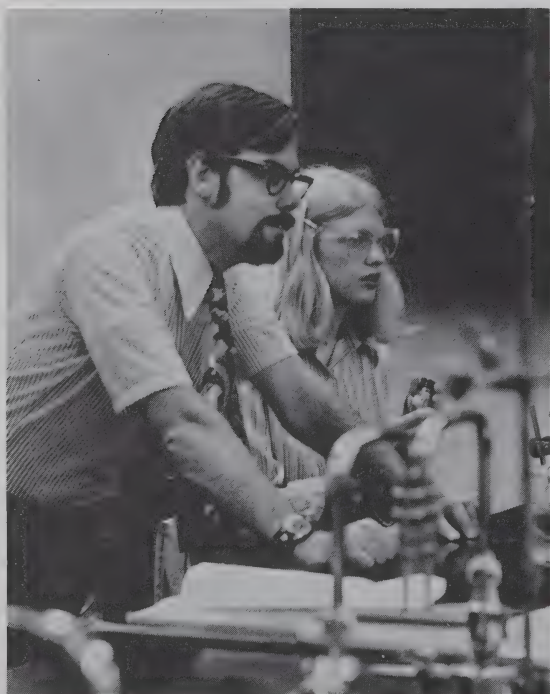
Costs 1981-82  
Total: \$8,165  
Tuition and Fees: \$6,115  
Room and Board: \$2,050

Lake Forest College is committed to the development of creative individuals who will live lives of leadership and service. The college has chosen to be a small community where close personal relationships exist

among 85 full-time faculty and some 1,000 students. More than 88 percent of the faculty hold the Ph.D. degree. The college maintains a faculty-student ratio of approximately 1 to 12. The diverse student body represents 42 states and 15 foreign countries.

Founded in 1857, Lake Forest College is located on 107 wooded acres in the residential community of Lake Forest, less than a mile from Lake Michigan and 20 miles north of Chicago. The location of the college in the Chicago metropolitan area means that internships and field research projects are important elements of the academic program.

Lake Forest College is in the fortunate position of being able to sponsor an extensive financial aid program. In 1980, about 50 percent of the students received a total of over \$2 million in financial assistance, with the average award in excess of \$5,700.



## Lawrence University

P.O. Box 599  
Appleton, WI 54912  
(414) 735-6500 ext. 232

Enrollment 1980-81 Total: 1,137 Men: 571 Women: 566	Admissions Interview Encouraged, but not required
Calendar Three terms, ten weeks each	Costs 1981-82 Total: \$7,650 Tuition: \$5,883 Room and Board: \$1,767
Admissions Tests Required S.A.T. or A.C.T.	

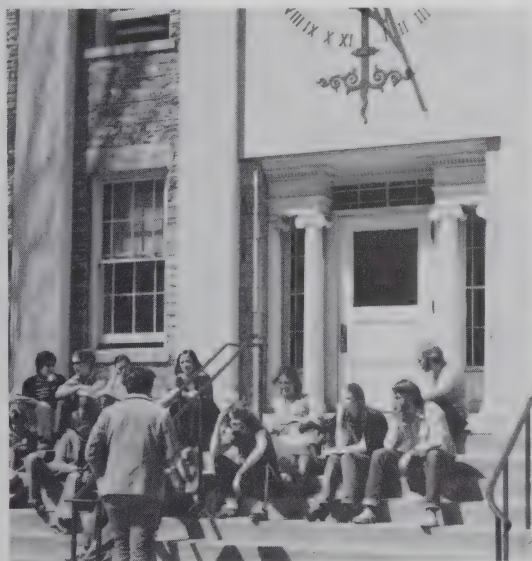
Lawrence University, founded in 1847, is considered unique because it combines the following qualities: a reputation for excellence in education, students who are treated as adults and who learn to use their minds well, a sound preparation for careers and graduate schools, a superior location that affords cultural opportunities and year-round recreational advantages, an attractive, vital campus-life program, a wealth of off-campus options, strong curriculum in both the college and the university's conservatory of music, diversity of ideas and people, and affordability.

Lawrence's extensive science and com-

puter facilities provide a wealth of hands-on experience. An outstanding new feature of the excellent science curriculum is the Bahamas Marine Term conducted jointly by the biology and geology departments. Other academic advantages include one of the few small-college classics departments in the country, the oldest theatre-drama department in a liberal arts college, and private painting studios for art students. Since 1874 the university's conservatory has been preparing students for music careers, and it provides Lawrence with cultural activities not available at most colleges.

The strong programs in the humanities, physical and social sciences are staffed by a superior faculty—95 percent of the university's professors, associate professors, and assistant professors hold the Ph.D. or highest degree in their field. A student-faculty ratio of 11 to 1 in the university's 22 academic departments assures individual attention, and students are encouraged to design their own programs of study. Lawrence offers several interdisciplinary areas of study, two of the newest being in public policy analysis and in environmental studies.

Lawrence is expensive, but it has a commitment to financial aid that allows it to say: In the past 17 years, every admitted student has received aid equal to his or her full demonstrated need.





## Macalester College

St. Paul, MN 55105

(612) 647-6357

Enrollment 1980-81

Total: 1,728

Men: 853

Women: 875

Calendar

4-1-4 Plan

Admissions Interview

Recommended

Costs 1981-82

Total: \$7,325

Tuition: \$5,425

Room and Board: \$1,900

Admissions Tests

Required

S.A.T. or A.C.T.

Macalester is a privately-supported, four-year college located in an historic, residential neighborhood of Saint Paul, Minnesota. Founded in 1874, it is known throughout the nation and many parts of the world for its high academic standards, for its deep commitment to the liberal arts and for the scholastic achievements of faculty and students. Macalester offers 34 majors, including interdisciplinary majors. It also offers extensive internship and volunteer programs which give students the chance to test out their classroom theories and to gain valuable experience by working in more than 300 health centers, business firms, service agencies, government offices and cultural facilities in the metropolitan Twin Cities.

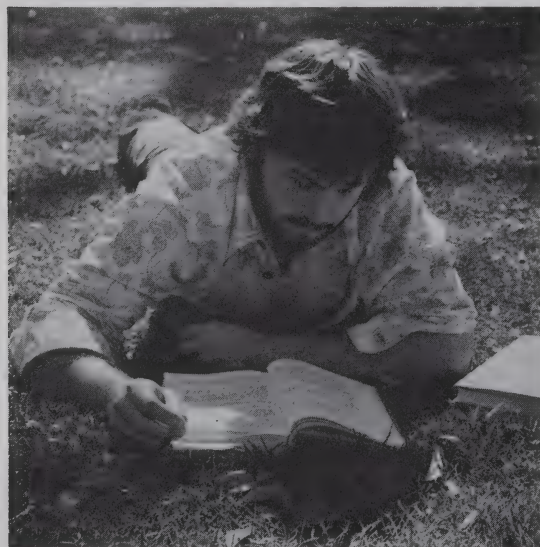
The College's modern facilities enable students to gain hands-on experience with the tools they will use in medical school, graduate school or their future careers. A few examples include scanning and transmission electron microscopes, stand-alone laboratory computers, greenhouses, environmental control chambers, x-ray equipment for brain wave experiments and a sophisticated PDP 11/70 central time-sharing computer system.

During 1980-81, the 1,728 students at Macalester came from 47 states, the District of Columbia, Puerto Rico, and 41 countries. They were purposefully drawn from a wide range of ethnic, economic, racial and religious backgrounds: 7.3 percent were Black, Hispanic or American Indian.

Of the 120 faculty members at Macalester, 82 percent have Ph.D.s and many are scholars and authors of national repute. But their top priority is teaching and several have earned national recognition for their excellence in classroom instruction.

The student-faculty ratio at Macalester is 14 to 1 and the small, personalized classes are characterized by lively discussions with students and faculty who know each other on a first-name basis.

For more information about Macalester and its extensive scholarship and financial aid program, contact the Admissions Office.



**Monmouth College**

Monmouth, IL 61462  
(309) 457-2131

Enrollment 1980-81	Admissions Interview
Total: 700	Recommended
Men: 375	
Women: 325	Costs 1981-82
	Total: \$6,615
Calendar	Tuition: \$4,290
3-3 Plan	Fees: \$255
	Room and Board: \$2,070

Admissions Tests  
Required  
A.C.T. or S.A.T.

At Monmouth, our greatest effort is teaching students well and providing the opportunity for each student to achieve the maximum individual growth of which he or she is capable — academically, socially, spiritually, morally, and physically. The college seeks for admission those students who can both profit from and contribute to the total educational programs of the college.

A Monmouth education is an individual experience, its breadth and depth determined only by the desire of students to learn from a

wide range of major fields of study, independent study programs, work experience, volunteer programs, and a broad array of social and cultural activities.

We believe that a liberal arts education is a viable link to the future for our students. The college strengthens this link through small classes, frequent student-faculty interaction, independent and interdisciplinary study, advanced placement, honor programs, and opportunities for special work.

With the recently-erected Haldeman-Thiessen Science Center and a natural sciences and mathematics division in which every professor holds the Ph.D., Monmouth's programs in these areas are outstanding.

The Monmouth curriculum allows students to choose from four different types of majors, and students may tailor a plan of study to fit their own particular needs. The normal four-year program consists of three ten-week terms per year, three courses per term. Monmouth's residential campus of 700 students and 65 faculty makes the student-faculty ratio 11 to 1. Monmouth College was founded in 1853 and is related to the United Presbyterian Church.





## North Central College

Naperville, IL 60540  
(312) 420-3400

Enrollment 1980-81  
Total: 1,296  
Men: 687  
Women: 609

Admissions Interview  
Encouraged, but  
not required

Calendar  
3-3 Plan

Costs 1981-82  
Total: \$6,400  
Tuition and Fees: \$4,285  
Room and Board: \$2,115

Admission Tests  
Required  
A.C.T. or S.A.T.

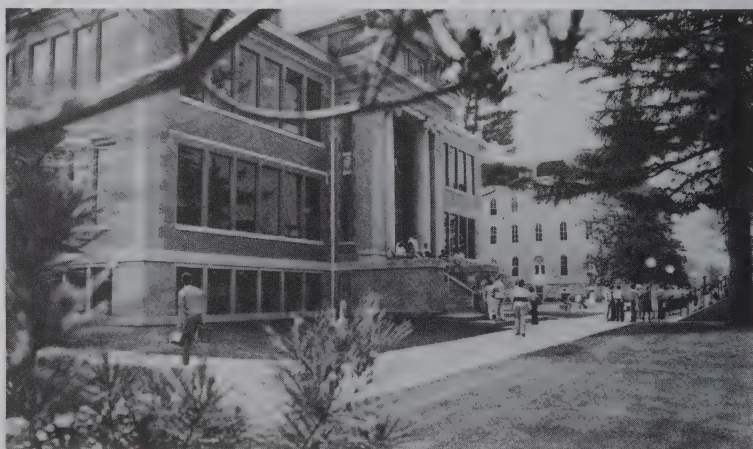
North Central College, founded in 1861, is an independent, coeducational, four-year liberal arts college, affiliated with the United Methodist Church. North Central is self-governing and fully accredited by the North Central Association of Colleges and Universities.

North Central College has an excellent location in Naperville, Illinois, a community of 43,000 in the west suburban area of Metropolitan Chicago, with the rich cultural, commercial and recreational resources of Chicago just 29 miles away. The 54-acre campus is ideally situated in a tree-lined residential area in the center of Naperville where modern facilities and ivy-covered buildings create a pleasant campus environment.

Small in size, North Central College is big in spirit and in the enthusiasm and zest for learning among its almost 1,300 students who

represent many geographic, ethnic and religious backgrounds. North Central is proud of its distinguished faculty of which 70 percent hold Ph.D.s in their fields. A student-faculty ratio of 16 to 1 and an average class size of 23 creates a healthy, stimulating interchange between students and faculty. The B.A. degree is awarded in 28 majors as well as in an almost unlimited variety of interdisciplinary areas of the student's own design. An individualized degree program is also available which enables each student, with the assistance of a faculty advisor, to design a program meeting the personal and career goals of the student and the educational objectives of the College. The Richter Fellowship Program funds (up to \$2,500) student-designed projects of unusual merit and scope which can include travel to almost any part of the world. Recent Richter Fellowships have included travel to Africa, Australia, England, Israel, Mexico, Spain and Washington, D.C. In addition, "no-need" scholarships are awarded to high school seniors who rank highest on a competitive examination.

With the availability of various extra-curricular activities, North Central College offers a total educational experience. North Central carries into all aspects of the college experience the development of moral values for living a free and responsible life. With such a background, students should be prepared for a lifetime of learning and for making reasoned choices about life.



**Ripon College**

Ripon WI 54971  
(414) 748-8102

Enrollment 1980-81	Admissions Interview
Total: 930	Recommended
Men: 526	
Women: 404	Costs 1981-82
	Total: \$7,100
Calendar	Tuition and Fees: \$5,400
Semester Plan	Room and Board: \$1,700
Admissions Tests	
Required	
S.A.T. or A.C.T.	

Ripon, an independent coeducational college of the liberal arts and sciences, founded in 1851, has retained the thoroughly tested principles of liberal education while developing innovations that make learning enjoyable, challenging, and rewarding. For well over a century, Ripon graduates have gone on to

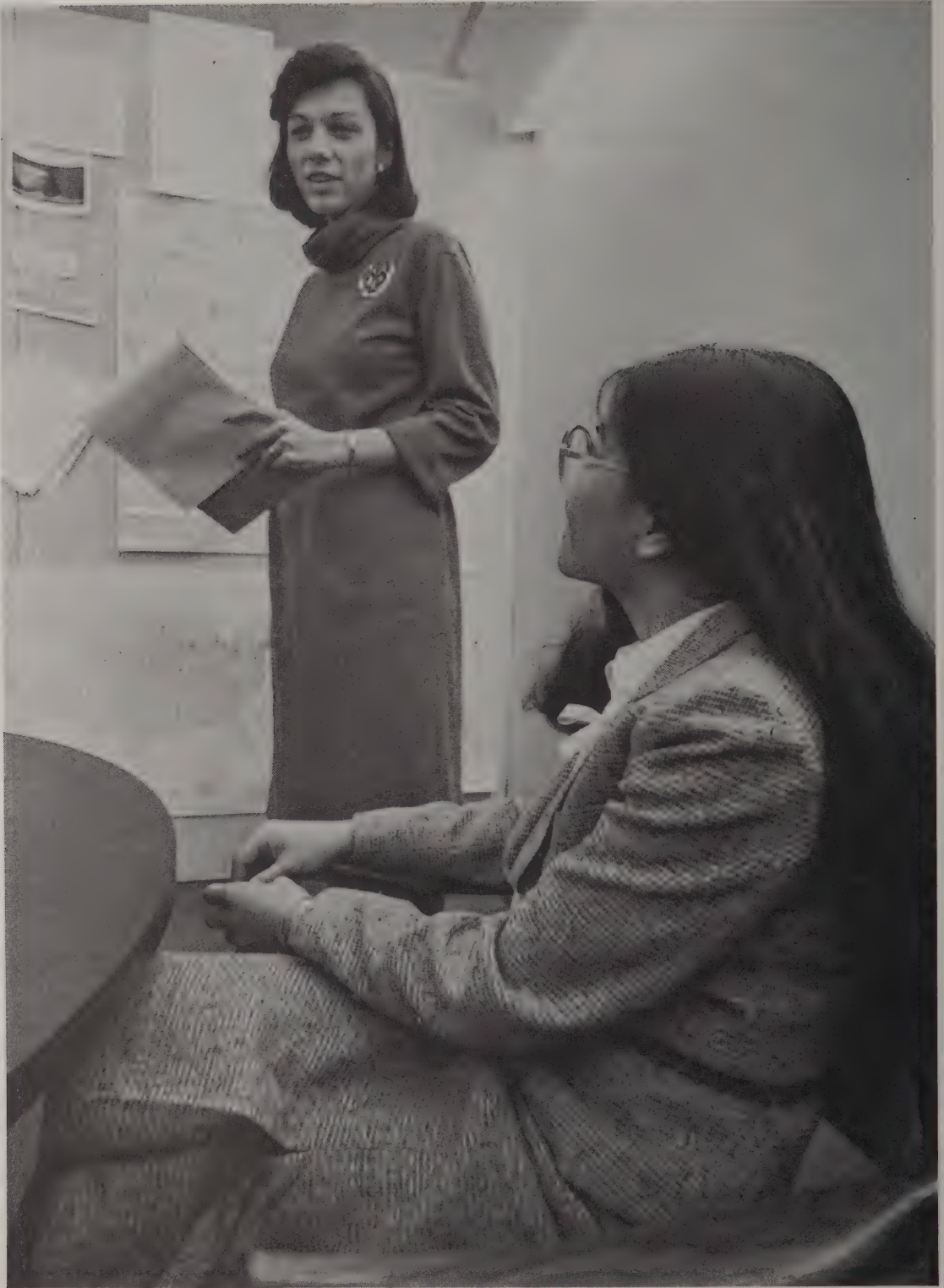
satisfying and responsible careers in virtually every profession and vocation.

Ripon students come from 34 states and 12 foreign countries, and from diverse social, ethnic, racial, and religious origins. Faculty members — 79 percent of whom hold the Ph.D. — are more committed to teaching and advising than other scholarly or professional activities. Since all faculty members teach both introductory and advanced courses, and since the student-faculty ratio is 13 to 1, students have the opportunity to work closely with outstanding teachers from the beginning of their college careers. More than 70 percent of the classes have fewer than 20 students.

Ripon also offers a full complement of extracurricular activities and counseling services. Thus, a Ripon education can embrace all aspects of a young person's development.







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# Courses

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# Course Descriptions

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## Course Abbreviations

Courses listed and described in this section are Rush University courses expected to be offered by faculty of the College of Health Sciences for the 1981-82 academic year, and do not represent a complete catalog of Rush University courses.

Rush University courses are listed alphabetically according to the *discipline* to which the course content is most closely related. These disciplines do not necessarily reflect a *department* in the University or in the Medical Center.

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## Course Numbers

A three-digit course number follows the course abbreviation. Courses numbered 300-399 are third-year level courses; courses numbered 400-499 are fourth-year level courses; courses numbered 450-499 are dual

level and may be taken for undergraduate or graduate credit; courses numbered 500-599 are graduate level; courses numbered in the 600's are doctoral level.

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## Course Content

The course title is followed by a brief description of course content. At the end of each course description are three hyphenated numbers, e.g., (2-3-3). The first number refers to hours per week in the classroom or

seminar; the second, the number of hours per week in laboratory or clinical setting; the third, to numbers of quarter hours of credit. If any of these numbers is variable, it is replaced with a "v."

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## Independent Study Courses

Students may enroll in an independent study course in any discipline of the University under the direction of the appropriate faculty member with his or her written permission and the approval of the Department Chairman.

The course numbers 441 and 591 will be

used for *Independent Clinical Study*, with the appropriate discipline prefix.

The course number 449 will be used for academic *Independent Study* for undergraduates and 599 for *Independent Study* for graduate students, with the appropriate discipline prefix.

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## Introduction of New Courses

Upon approval of the faculty, new courses not listed in the catalog may be listed as *Special Topics* under the appropriate discipline prefix and the numbers 300, 400 or 500 to

indicate the level of offering. The topic covered will be listed on the student's academic record.



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## Biochemistry

### BIOCH 301

*Basic Biochemistry.* A lecture course designed as an intensive introduction to biochemistry. Emphasis is on descriptive chemistry of the main classes of biochemical compounds and metabolic processes in the human organism and on changes associated with disease processes. Prerequisite: one year general chemistry, one course organic chemistry. (4-0-4)

### BIOCH 411, 412

*Clinical Chemistry I, II.* A course on the analytical and biochemical basis of methods used for chemical analysis of body fluids as related to diagnosis and treatment of disease. Topics discussed include blood sugar, carbohydrate tolerance tests, renal function tests, plasma electrolytes, blood gases, proteins, enzymes, liver function tests, cholesterol, and lipids. Critical evaluation of methods is emphasized. Prerequisite: BIOCH 301. (3-0-3, 3-0-3)

### BIOCH 413, 414

*Clinical Chemistry III, IV.* These courses

cover these tests and topics: chemical hematology, special proteins, vitamins, biogenic amines, elementary toxicology, thyroid function tests, and steroid methods. Principles underlying automated and computer application methods will be discussed. Prerequisite: BIOCH 411, 412. (2-0-2)

### BIOCH 461, 462, 463

*Biochemistry I, II, III.* A course in the chemistry and metabolism of biologically important compounds, amino acids, and proteins; nucleic acids and protein synthesis; bioenergetics; biochemical function of enzymes; common pathways of metabolism; carbohydrates and lipid metabolism. Additional topics include the integration of cellular metabolism; regulation of hydrogen ion concentration; the reproduction of the molecular level, including genetic coding and DNA replication, transcription and translation; nucleic acids and disease; hormones; regulation of whole body metabolism; biochemical role of vitamins; calcium and phosphate metabolism. (v-0-v)

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## Health Care Education

### HLCED 454

*Development of Instructional Media.* The study of media as arts of communication. A survey of communication theory and its relationship to the communication process. Utilizing various instructional media, students design a program of instruction relating to some aspects of the health professions. (2-0-2)

### HLCED 523

*Communication I.* The student will explain the application of communication techniques to the health care setting in terms of purposes and functions, the generic and special communication needs of people encountered in the health care system, the classical communication model, selected principles of learning, and the components of a communication event. Limited to clinical nutrition students in Tracks I and II. (2-0-2)

### HLCED 524

*Communication II.* The student will design a teaching unit for a specific group of learners on an appropriate topic in clinical dietetics or nutrition, teach the unit, and evaluate the effectiveness of the instruction. The student will operate audiovisual equipment commonly utilized as instructional tools in health care settings. Prerequisite: HLCED 523. (2-0-2)

### HLCED 533

*Introduction to Instructional Design in the Health Sciences.* The student will develop a basic understanding of the learning process by preparing a teaching unit in a content area of choice and for a specified group of learners. The student will define or explain selected principles of learning as they apply to adult learners. The student will develop skills in evaluating teaching effectiveness. (3-0-3)

**HLCED 583**

*Clinical Investigation I.* A seminar course based on the philosophy of science. The central aim of the course is to provide a basis for the utilization of the methods of science in professional practice. Content includes introductory statistics, research methodology and ethical and legal considerations in clinical

research. Prerequisite: Introductory Statistics. (2-0-2)

**HLCED 584**

*Clinical Investigation II.* A continuation of HLCED 583 Clinical Investigation I. Prerequisite: HLCED 583. (2-0-2)

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**Health Systems Management**
**HSMGT 301**

*Health Care Management.* Organizational design and managerial processes of planning, organizing, directing, and controlling, as well as the dynamics of managerial jobs, are studied. Emphasis is on management strategies and techniques in the area of health care delivery. (3-0-3)

**HSMGT 452**

*Contemporary Analysis of the Health Science Professions.* A seminar study-group approach to selected contemporary issues in the health professions. (The selection of issues changes from time to time as high-intensity trends develop or as student needs develop.) The issues selected range across the social, ethical, legal-legislative, economic, and historical roots of the health professions. Senior or graduate standing. (2-0-2)

**HSMGT 501**

*Medical Care Organizations.* An overview of medical care systems current problems in health care and an analysis of the administration of personal health care delivery in the United States is covered in this course. Attention is given to the role of health administrators, health care resources and financing mechanisms.

**HSMGT 506**

*Medical Sociology.* The health care delivery system is fundamentally a social system which relies upon a very large number of social behaviors by patients, professionals and other role players. An understanding of

health care delivery requires an understanding of the cultural, social, and social psychological forces which regulate those behaviors. The course examines the dynamics of these behaviors with special attention to social psychological and small-group characteristics of role players. (3-0-3)

**HSMGT 511**

*Administrative Decision Making.* This course covers selected topics including rational decision making, factors affecting decision making and their impact, roles and limitations of information and data, techniques for data collection and information gathering and multi objective decision making. (4-0-4)

**HSMGT 515**

*Human Resource Management.* Building upon management theory and organizational structures, this course addresses human relations skills needed by a manager. Personnel decisions such as recruitment and hiring, employee development, promotions and terminations become difficult in an environment filled with both federal and state legal constraints. The manager learns techniques for motivating employees, appraising performance, dealing with disciplinary problems and counseling employees. Additional areas discussed include the union/management relationship, compensation systems, employee rights, career mobility and training needs, dealing with change, equal employment opportunities and affirmative action. (4-0-4)



**HSMGT 516**

*Personnel/Compensation Systems.* General compensation theory is stressed in this course. Students become acquainted with the motivational aspects of compensation and a variety of labor cost issues. Analytical models and quantitative methods as they apply to personnel/compensation issues are covered as well as the utilization of manpower analysis. (3-0-3)

**HSMGT 517**

*Labor Relations.* An overview of labor relations, the history, regulatory climate and the market economics are covered in this course. Students are exposed to the union/non-union environment, processes of collective bargaining, day-to-day employee relations and dealing with outside agencies. Emphasis is on labor relation strategies and techniques as applied to the special area of health care. (3-0-3)

**HSMGT 518**

*Health Manpower Planning.* This course concerns approaches to determining appropriate levels of supply and distribution of health manpower including physicians, nurses and related health professionals. Issues of certification licensure are discussed and health manpower legislation is analyzed. Strategies for recruitment and retention of manpower in under-served areas is addressed. (3-0-3)

**HSMGT 522**

*Multi-Institutional Arrangements.* Using several analytical frameworks assessing organizational and operational structures, an in-depth exploration of the development, operation and operational problems of multi-hospital systems is stressed. Types of management control, anticipated benefits, measures of performance and incentives and barriers to further development are illustrated through lectures, readings and case studies. (3-0-3)

**HSMGT 523**

*Treatment Process/Epidemiology.* An introduction to the process of health care delivery. Students observe the practice patterns of various health care providers, measure need and

demand, examine systems for monitoring the quality of care and examine the social and environmental factors affecting health. Students also evaluate the effectiveness of the health care delivery system. (3-0-3)

**HSMGT 533**

*Health Economics.* This course provides the student with the opportunity to see how economics tools and theories are applied when delivering health services. Topics include the impact of medical services on health, medical care markets, supply and demand for medical care and the role of regulation on supply and demand. (3-0-3)

**HSMGT 534**

*Health Care Finance.* Students study accounting/financial management principles and the application of these principles to the myriad of operational problems in the not-for-profit environment. The role of financial management in the operation of a health care institution include such topics as accounting, managerial and cost accounting, budgeting, and rate setting.

**HSMGT 535**

*Budgeting/Forecasting.* The process of budgeting is studied and applied using case methods. The purposes and techniques of forecasting financial results for individual projects and the whole operation is also discussed. Specific topics include the relationship of planning and budgeting, budget statistics, operating budgets, capital budgets, quantitative techniques and forecasting.

**HSMGT 536**

*Corporate Finance.* This course studies the treasury function of a hospital with a special focus on investment management and capital financing. Specific topics include capital planning, investment analysis, short and intermediate-term financing, credit rating agencies and hospital lenders, evaluating long-term financing options, legal documentation of hospital financing, and the role of the independent financial feasibility study.

**HSMGT 537**

*Reimbursement/Regulation.* The various elements of reimbursement (current and

future) are covered as is the impact of reimbursement/resource regulation on the planning, financing and operating of a hospital. The objective of the course is to make each person fully aware of the history, the philosophy and the current mechanism for regulating reimbursement so that each person will be able to better understand the potential impact in day-to-day decision making and in the review and analysis of impact of proposed changes. Blue Cross, Medicare, Medicaid, rate setting, and "competition" systems are studied.

#### **HSMGT 543**

*Health/Corporate Law.* The subject content of traditional health law courses is topical in nature. The HSM Health Law course represents a departure in that it recognizes the need for a systematic and comprehensive knowledge of the law. The course provides Health Systems Management students with a mini-law school experience in which students are exposed to traditional law school courses such as contract law, tort law, corporate law, labor law and civil procedure. The format provides the Health Systems graduate with a working knowledge of the law as it impacts on health care delivery systems. (4-0-4)

#### **HSMGT 545**

*Management Theory/Organizational Analysis.* The basic premise of this course is that knowledge of the basic concepts and principles of organizational behavior will help the future health systems manager better understand the internal and external forces that influence hospital functioning, major problems that often arise, and how these problems are resolved. Major emphasis is placed upon how the social structure and internal control processes of organizations influence organizational performance and goal-attainment. (4-0-4)

#### **HSMGT 547**

*Labor Law.* This seminar course covers a myriad of labor law related topics. Students are exposed to an historical background of labor/management relations, employment discrimination, regulation of wages and hours of work. Employee benefit packages, job safety, union activity regulation, affirma-

tive action and common law remedies are also featured. (3-0-3)

#### **HSMGT 552**

*Management Information Systems.* Students are exposed to the important role of information and information systems in health care management. Types of information systems and their management as well as the evolving role of these systems is covered in this seminar course. Concepts and theories are illustrated through and reinforced by vendor presentations. (4-0-4)

#### **HSMGT 553**

*Computers for Health Systems Managers.* This course provides the student with a broad base of technical and conceptual computer skills. The student is exposed to the history of computers; their parts, types and languages, data base creation and storage and software technology. The importance of data in hospital administration is stressed throughout. Course includes a practicum component which illustrates lecture material and teaches fundamental computer skills (programming, SAS). (4-0-4)

#### **HSMGT 555**

*Advanced Organizational Analysis.* This required course for the management track combines the study of organizational change, control techniques, behavioral theories of management, goal setting and conflict resolution. In-depth discussion of current topics related to organizational problem-solving and institutional planning augment didactic and practica sessions. (3-0-3)

#### **HSMGT 556**

*Ambulatory Care Management.* The course examines the development of medical group practice, common contemporary organizational models, and their role within the health care system. The application of analytical skills and use of management systems in the group practice setting are discussed. Compensation of hospital-based physicians and reimbursement aspects are studied in detail. (3-0-3)

#### **HSMGT 557**

*Quality Assurance/Risk Management.* An exploration of the history and principles of



quality assurance and the principles of risk management are covered. Students study various topics including consumer expectations, quality assurance/risk management interface and medical malpractice. Attention is given to the often conflicting yet supporting roles and responsibilities of the medical staff, administrative staff and governing board. (3-0-3)

#### **HSMGT 563**

*Health Care Planning/Public Policy.* This course summarizes historic trends in health planning legislation and their influence on health policy and hospital planning practices; provides an understanding of the motivation underlying health legislation and the role of legislators, government agencies, private consumer/provider organizations and the general public; nurtures understanding of the areawide planning process and the role of areawide planning agencies; and acquaints students with an understanding of emerging health policy issues and their future implications. (4-v-4)

#### **HSMGT 564**

*Public Policy/Regional Planning.* Current public policy issues are covered in this course. Students are exposed to policy planning issues through small group discussion, presentation from major policy spokesmen, and through participation in meetings and planning sessions with external agencies. (3-v-3)

#### **HSMGT 565**

*Facilities Planning.* Students are exposed to all phases of facilities planning including capital expenditure planning, budgeting and control. Space allocation techniques, design analysis and construction process are also highlighted. Project costs and schedule control techniques as well as alternate project delivery approaches are illustrated through case/project applications. (3-0-3)

#### **HSMGT 566**

*Corporate Planning/Marketing.* The course acquaints students with an understanding of planning theory, terminology and conceptual models for institutional planning and provides an understanding of marketing principles and techniques and their relationship to

strategic planning. It also summarizes the components of a strategic plan and an operational plan, supplies sources of data and the reliability of these sources and provides an understanding of the role of planning as a method of management control.

Planning projects are carried out at Rush-Presbyterian-St. Luke's Medical Center and its network of affiliated institutions. (3-0-3)

#### **HSMGT 572**

*Community Health Assessment.* This course covers in-depth approaches aimed at assessing health needs, assessing health status and their relationship to health resources. Concepts of demography, epidemiology and economics are applied in determining needs and demands for health care services. Students study approaches to determining market share and its application within various distribution systems. Field work is required as part of this course. (3-0-3)

#### **HSMGT 574**

*Introduction to Health Care Management.* In this survey course, the student compares the major patterns of hospital ownership, describes the corporate structure relative to hospital organization and governing authority, explains selected governmental regulations on the hospital industry, describes risk management programs in terms of purpose and the interrelationship of component activities, summarizes the politics and economics of community health planning, and describes the management process in terms of the four areas of managerial activity. Limited to clinical nutrition students or permission of instructor. (2-0-2)

#### **HSMGT 581**

*Experimental Design/Program Evaluation.* The student is exposed to and asked to develop specific research techniques. Alternative forms for evaluation are analyzed, as well as the important interrelationships between managerial concerns and statistical requirements. This course provides the student with the necessary basis for his/her independent study and will manifest methods for proposal writing and results reporting. (3-0-3)

**HSMGT 583, 584**

*Statistical Techniques I, II.* An exploration of statistical techniques as applied within the health care setting. Emphasis, during the first quarter, is on graphical methods, descriptive statistics, probability theory and non-parametric comparison. During the second quarter, students further their understanding of statistical techniques with emphasis on the study of linear models. Topics covered include: basic experimental design concepts, simple and multiple regression and analysis of variance. SAS is used to facilitate data analysis. (4-0-4)

**HSMGT 585**

*Quantitative Methods.* An exploration of quantitative techniques as applied to hospital decision making. Attention is given to operational analysis including the description and analysis of hospital departments and improving and maintaining operations. Emphasis is on conceptual development and problem solving. (4-0-4)

**HSMGT 587**

*Advanced Operations Research/Modeling.* This course extends theoretical and practical bases presented in previous systems courses. Topics discussed include: mathematical modeling algorithms, simulation modeling, utility theory and decision analysis techniques. In-depth student projects help illus-

trate topics discussed. Specific content varies with current faculty/student interests. (3-0-3)

**HSMGT 595**

*Graduate Seminar.* This course culminates the concentration sequence. Students, under the guidance of a concentration faculty representative, prepare and deliver a formal presentation and paper on their integrated concentration study experience. (3-0-3)

**HSMGT 597**

*Graduate Project.* An in-depth study, this project consists of a detailed final project and closure seminar. The final project selected in the area of concentration would include review, evaluation design and methodology analysis and conclusions. Students are expected to present their project results to an open faculty forum. (v-0-v)

**HSMGT 598**

*Thesis.* A rigorous, detailed final project requiring research design, methodology, literature review, analysis and conclusion. A formal paper and oral defense is required of all students selecting this option. Students selecting the thesis option are required to take the Experimental Design/Program Evaluation Course (HSMGT 581). (v-0-v)

**HSMGT 599**

*Independent Study.* (v-0-v)

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**Hematology****HEM 301**

*Hematology I.* Study of normal hematopoiesis including development, metabolism, and function of red cells, white cells, and platelets and an introduction to the various associated hematologic disorders. Includes laboratory experiences dealing with basic routine tests performed in a clinical hematology laboratory, such as simple automated cell counting, differential counting, and sedimentation rates. (3-6-5)

**HEM 425**

*Hematology II.* Review of normal

hematopoiesis and an indepth study of erythrocyte disorders, their etiologies, pathophysiology, clinical features, and significant laboratory findings. Prerequisite: HEM 301. (2-0-2)

**HEM 426**

*Hematology III.* Continuation of HEM 425 with an indepth study of leukocyte and hemostasis disorders that covers etiology, clinical features, and significant laboratory findings. Prerequisite: HEM 425. (2-0-2)



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## Humanities

### HUM 461

*Physician as Writer.* An exploration of selected fiction, chronicles, and autobiography by distinguished 20th century physician-writers (including William C. Williams, Chekhov, and Azuela). Focus will be on writers' unique responses to questions of medical ethics, involvement in social issues, and doctor-patient relationships as well as on the physician as philosopher and humorist. (2-0-2)

### HUM 462

*Physician on Stage and in Fiction.* An investigation of distinguished 19th and 20th century plays and novels that feature the doctor as a major character. Works by G.B. Shaw, Eugene O'Neill, Fredrick Durrenmatt, Tennessee Williams, Henrik Ibsen, and Sinclair

Lewis examine the physician in crises, the profile of a scientific man, the psychiatrist as character, and the American regional practitioner. (2-0-2)

### HUM 463

*Disease As Subject in Contemporary Literature.* This course will examine the depiction of disease in outstanding fiction and poetry, as well as in the memoirs, journals, and personal narrations of some distinguished contemporary writers who faced disease and analyzed their experiences with acute perception. Works by Albert Camus, Andre Gide, Eleanor Clark, John Updike, Thomas Mann, John Berryman, and Katherine Ann Porter will be considered. Lectures, readings, and discussion. (2-0-2)

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## Immunology

### IMMUN 301

*Basic Immunology.* An introduction to the basic concepts and terminology of immunity including development, structure, and function of the lymphoid systems, the basis of antigenicity, antibody structure, methods of detection and measurement, mechanism of cellular immunity, white cell function, hypersensitivity reactions, the complement system, and mechanisms of immune suppression and tolerance. Methods of laboratory evaluation of humoral and cellular immunity are introduced. (3-0-3)

### IMMUN 402

*Clinical Immunology.* Study of clinical and applied immunology as it relates to the role of the immune response in production of disease; primary and secondary immunodeficiency atopy and other forms of hypersensitivity, autoimmunity, transplantation and tumor immunity. The use of immunology as a diagnostic, prognostic and therapeutic aid is studied. Prerequisite: IMMUN 301. (2-0-2)

### IMMUN 403

*Clinical Serology.* Students will learn to

apply the fundamental concepts of antigen-antibody interactions to routinely performed assays of syphilis and non-syphilis serology. Laboratory sessions cover proficiency in performance and familiarity with purpose, principle and interpretation of the following tests: RPR, CSF-VDRL, TPA, FTA-ABS, Monospot, Monotest, Heterophile, ASO, AHT, ANTI-DNAase B, RF Latex, RF SCAT, Anti-Thyroglobulin and Anti-Microsomal. Prerequisite: IMMUN 301. (2-6-3)

### IMMUN 421

*Immunohematology.* Blood group antigens and antibodies from the discoveries of Landsteiner in 1900 to the present day are studied. Blood banking procedures involved in drawing, testing, storing, and transfusing whole blood and its components are discussed. The laboratory section of this course will deal with the basic blood bank procedures including ABO grouping, RH typing, compatibility testing, and special antibody studies. Prerequisite: IMMUN 301. (2-6-3)

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## Medical Technology

### MEDTK 303

*Body Fluid Analysis.* Analysis of various body fluids with emphasis on the theory and practice of clinical procedures. Component topics will include the analyses of urine, gastric juice, cerebral spinal fluid, feces, semen, transudates and exudates. (3-3-4)

### MEDTK 304

*Basic Laboratory Skills.* Study and practice of basic laboratory skills used in the various clinical laboratory areas. Topics covered include instrumentation, proper use and maintenance; manual skills such as pipetting, titrating and venipuncture; preparation and standardization of reagents; and laboratory calculations. (1-9-5)

### MEDTK 305

*Patient Care Techniques.* Clinical experience in the hospital patient care areas includes blood collection, specimen handling and processing procedures, as well as interaction with patients and professional staff of the hospital. Prerequisite: MEDTK 304. (0-4-2)

### MEDTK 421

*Practicum in Clinical Chemistry.* Rotation through the hospital clinical biochemistry laboratories. Application of basic skills learned in student chemistry laboratory; instrumentation and advanced methodologies are dealt with. (0-24-8)

### MEDTK 422

*Practicum in Hematology.* Rotation through the hospital clinical hematology laboratories. Application of basic skills learned in student laboratory; instrumentation and advanced methodologies are dealt with. Radio-hematology, bone marrow techniques, and coagulation are included. (0-24-8)

### MEDTK 423

*Practicum in Immunology.* Rotation through the hospital clinical immunology laboratory. Application of basic skills learned in student laboratory; instrumentation and advanced methodologies are dealt with. (0-16-4)

### MEDTK 424

*Practicum in Microbiology.* Rotation through the hospital clinical microbiology laboratories. Application of basic skills learned in student laboratory; instrumentation and advanced methodologies are dealt with. (0-16-8)

### MEDTK 425

*Practicum in Immuno-hematology.* Rotation through the hospital blood bank laboratory. Application of basic skills learned in student laboratory; instrumentation and advanced methodologies are dealt with. (0-16-4)

### MEDTK 441

*Seminar in Medical Technology.* Discussion of current topics in medical technology and associated fields. Students present abstracts. (2-0-2)

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## Microbiology

### MICRO 311

*Diagnostic Bacteriology.* Special emphasis is on diagnostic procedures employed in the clinical bacteriology laboratory, such as specimen collection, isolation and identification of medically important bacteria, antibiotic sensitivity testing and determination of serum antibiotic levels. Course includes laboratory exercises associated with these various concepts. Development of proficient skills in these various techniques is stressed. (3-9-5)

### MICRO 411

*Parasitology, Mycology and Virology.* This course provides clinical background in mycology, parasitology and virology. Emphasis is on the disease involved and on diagnostic procedures used in the laboratory. The laboratory portion consists of identification, specimen collection, and processing of medically important viruses, fungi, and parasites. Prerequisite: MICRO 311. (3-6-5)



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## Neurosciences

### NEU 501

*Introduction to Neuroscience.* A review of the anatomy and physiology of the nervous system, with particular emphasis given to the structure and function of the brain and cranial nerves. Will include both gross and microscopic structure, and the normal mechanisms of transmission and communication which operate at each level. (3-0-3)

### NEU 503

*Neuropsychology.* A study of the brain mechanisms normally involved in learning, perceptual, language, and emotional behaviors. Typical and atypical development of these functions and how they may be influenced by disease, trauma and aging. Will include attention and memory and the concepts of neural plasticity and recovery of function. (3-0-3)

### NEU 521

*Neurophysiology I: Sensory System.* A study of sensory and sensory integrative processes

of the nervous system, the common features and specific attributes to each system as they function to affect perception and adaptive behaviors. Will include phylogeny, ontogeny, anatomy, and physiology of each modality; somatosensory, vestibular, visual, auditory, and the chemical senses of smell and taste. Prerequisite: NEU 501. (3-v-3)

### NEU 522

*Neurophysiology II: Neurology of Motor Behavior.* A study of normal motor behavior and motor mechanisms, the clinical syndromes that typically affect motor behavior and function, and how the neurological examination can identify types of dysfunction. Will include behavioral aspects of syndromes of the parietal and frontal lobes, the corpus callosum, facial and vocal expression, and the apraxias, as well as the mechanisms of motor control and their organization at each level. Prerequisite: NEU 521. (3-v-3)

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## Nutrition

### NUTRI 455

*Ecology of Nutrition.* The sociological, psychological, economic, political, and cultural factors that affect the intake of required nutrients are observed on a global basis. Ecological imbalance, nutritional diseases, and their long-term ramifications on the individual and his/her world are studied in detail. (3-0-3)

### NUTRI 466

*Advanced Human Nutrition.* The student will develop a critique on a selected nutritional topic(s) of current contention. Literature search and documentation of positions will be an integral part of student critiques. Students will present critiques both in writing and orally to class. Permission of instructor. (3-0-3)

### NUTRI 503

*Dietetics I.* The student will prepare and document a nutritional care plan for a client by: (1) assessing nutritional needs utilizing

anthropometric, biochemical, and physical measurements and appropriate data collected from medical, social and dietary histories; (2) writing short- and long-term nutritional care goals and objectives which are consistent with total health care planning and which identify evaluation tools and techniques; (3) developing a plan of action to accomplish objectives that is appropriate in terms of client's capabilities, motivation, and life style; (4) demonstrating correct procedure for documenting nutritional care in the Medical Record and Diet Kardex. Limited to clinical nutrition students in Track I. (4-0-4)

### NUTRI 504

*Dietetics II.* The student will develop an understanding of the general organization of food service systems and subsystems in a hospital setting by describing the purposes and functions of such systems, explaining the relationship of food service systems to other

service and management components in the hospital, describing factors in food service facilities design, and by explaining means for evaluating food service operations. Prerequisite: NUTRI 503. (2-0-2)

### **NUTRI 505**

*Dietetics III.* The student will identify nutritionally vulnerable population groups and suggest ways to prevent or correct these nutritional problems. Using the case study approach, the student will explain the inter-relationship of health, social and economic factors, and describe the goals and scope of community programs established to provide assistance in solving specified nutritional problems. Prerequisite: NUTRI 504. (1-0-1)

### **NUTRI 510**

*Current Professional Issues.* The student will participate in discussions intended to examine professional issues in the field of dietetics that are of current interest. These discussions will include, but not be limited to: the definition of the role of the dietitian in various settings; available career options; the development and application of professional standards through peer review, audit and quality assurance; responsibilities to nutrition programs established by various public and private agencies; participation in professional organizations. Limited to clinical nutrition students in Track I. (2-0-2)

### **NUTRI 511, 512, 513, 514, 515**

*Practicum I, II, III, IV, V.* The student will apply the processes of planning, organizing, directing and evaluating nutritional care for individuals and groups of varying age and life-styles, in sickness and in health. In the clinical units of a hospital, the student will function as a member of the health care team by: (1) assessing nutritional needs of clients and developing care plans consistent with total health care planning; (2) implementing care plans which will involve processes of management of available resources and of counseling; (3) monitoring short-term out-

comes of dietary intervention and evaluating efficacy of nutritional care plan. In the food service units of a hospital, the student will function as a member of the management team by: (1) analyzing menus according to established criteria; (2) identifying, developing and monitoring cost and quality control procedures applicable to food service subsystems of procurement, production and distribution; (3) maintaining sanitation and safety standards; (4) applying principles and practices of personnel management in the procurement and direction of the work force; (5) identifying and maintaining appropriate records for fiscal management. Given practical experience increasing in complexity, the student will be expected to develop competence at the beginning practitioner level in both food service management and clinical dietetics. Limited to clinical nutrition students in Track I. (NUTRI 511, 0-24-6; NUTRI 512, 0-24-6; NUTRI 513, 0-20-5; NUTRI 514, 0-20-5; NUTRI 515, 0-v-3)

### **NUTRI 516**

*Clinical Practice.* The student completes a special project related to an area of interest in a clinical nutrition or food service management setting. Experience in applying research methodology and problem-solving techniques to dietetic practice is gained through project development. Limited to clinical nutrition students in Track II. (4-0-4)

### **NUTRI 525**

*Advanced Mineral Metabolism.* The student will describe current understanding of the absorption, metabolism, assessment and effects of deficiencies of micronutrient minerals. The student will be responsible for only four minerals in detail: iron, zinc, copper and chromium. The student will review other micronutrient minerals describing only the most recent information. Limited to clinical nutrition students in Track II and III or permission of instructor. (2-0-2)



**NUTRI 526**

*Advanced Vitamin Metabolism.* Given the fundamental principles regarding each vitamin—that is, structure, known metabolic functions, deficiency syndrome, and natural occurrence, the student will evaluate and explain methodologies involved in determining the human requirement for the trace nutrient. These basic principles will be integrated with literature searches by the student and class discussions on determining nutrient status in health and disease. The student will explain pharmacological applications of these nutrients and claims for other “pseudo-vitamins.” Limited to clinical nutrition students in Tracks II and III or permission of instructor. (1-0-1)

**NUTRI 527**

*Advanced Protein Metabolism.* Given a basic overview of mammalian protein metabolic pathways, the student will describe the major contributions each organ provides in response to various mixed diets, during infection and in certain disease states. The student will explain methods currently employed to estimate protein requirement (Nitrogen balance and factorial methods) and techniques for determining the protein quality of foods and diets in general. Limited to clinical nutrition students in Tracks II and III or permission of instructor. (3-0-3)

**NUTRI 528**

*Advanced Carbohydrate and Lipid Metabolism.* The student will explain the regulation of carbohydrate and lipid metabolism in liver, muscle, kidney, brain and adipose tissue by describing changes in metabolic flux wrought by diet composition and starvation. Limited to Clinical Nutrition students in Tracks II and III or permission of instructor. (4-0-4)

**NUTRI 532**

*Nutritional Assessment.* Given the theoretical bases for the various tools employed in the assessment of nutritional status, the student will develop and exercise such skill in simulated and clinical settings. (2-0-2)

**NUTRI 533**

*Obesity.* The student will critically evaluate factors thought to be important in the regulation of body weight and will explain methods of treating obesity. The student will evaluate his/her own attitude toward the patient who is obese. (1-0-1)

**NUTRI 534**

*Drug-Nutrient Interactions.* The student will describe the basic mechanisms of drug metabolism and the changes which occur during physiological development. The student will explain the effects of various dietary components on absorption, metabolism and excretion of drugs, incompatibilities between drugs and diet and the effects of drugs on nutrition. (1-0-1)

**NUTRI 535**

*Inborn Errors of Metabolism.* The student will explain the etiology, pathology, diagnosis, and dietary management of phenylketonuria, maple syrup urine disease, lactose intolerance and galactosemia. (1-0-1)

**NUTRI 536**

*Nutrition and the Immune Response.* The student will describe current understanding of the basic mechanisms of the immune response including developmental aspects and integration. The student will review literature on basic immunology and explain the effects of nutritional deficiencies on the development and functioning of the immune response. (1-0-1)

**NUTRI 537**

*Total Parenteral Nutrition.* Following a historical review of intravenous feeding, the student will explain techniques for planning, initiating and monitoring intravenous feeding, and describe in detail iatrogenic and naturally occurring complications associated with intravenous feed. (1-0-1)

#### **NUTRI 541**

*Developmental Nutrition—Conception to Three Years.* The student will explain why human nutritional development is most active during the fetal and early postnatal period. The student will describe the normal development of the fetus and young infant and the requirements during pregnancy and lactation to meet these needs. The student will review methods of evaluating the adequacy of nutrition during this developmental period and decide which is best in a given clinical setting. Using the basic information, the student will formulate a plan for managing patients. (1-0-1)

#### **NUTRI 542**

*Developmental Nutrition—3 to 23 Years.* When presented with the theoretical (biological, physiological) aspects of nutritional requirements for this age group in the United States population, the student will compare these data with survey data including food consumption, biochemical, anthropometric and health statistics. Subsequently, the student will explain the following special nutritional health concerns in terms of etiology or needs and therapeutic response: anorexia nervosa, athletic performance, hyperactivity, hunger and learning behavior. (1-0-1)

#### **NUTRI 543**

*Developmental Nutrition—The Mature Years.* Following a superficial review of the aging process from young adulthood through middle-age, the student will describe the changes in nutrient requirements during this period of life, and explain in detail the dietary treatments for susceptible middle-age maladies (osteoporosis, diverticulitis, gout and adult-onset diabetes). (1-0-1)

#### **NUTRI 544**

*Developmental Nutrition—Aging.* Given an overview of the metabolic alterations that accompany aging, the student will describe and defend needs for this population group. Key pathologies prevalent in the geriatric popula-

tions will be presented by students for class discussion. The effects of these pathologies on nutrient intake and utilization will be described. (2-0-2)

#### **NUTRI 565, 566, 567**

*Seminar I, II, III.* The student will present a minimum of one seminar per quarter to peers and faculty concerning either a critical survey of recent research in an area of nutritional significance or a proposal on his/her selected project in clinical nutrition. Other seminar sessions on nutritional topics will be presented by invited speakers in which the student will participate by posing questions and by actively becoming involved in the discussion. Techniques for effective seminar presentations will be presented to and practiced by students. Also, skills for abstract writing will be presented to students and utilized several times each quarter on suggested literature provided by speakers. Limited to clinical nutrition students in Tracks II and III. (1-0-1, 1-0-1, 1-0-1)

#### **NUTRI 571**

*Management in Clinical Dietetics.* The student will explain the following concepts in terms of their application to and interrelationship in the management of a clinical dietetic area: strategic planning, financial considerations and budget control, personnel policy implementation, management decision making process, and professional behavior within the organization. Prerequisite: Limited to clinical nutrition students in Track I. (2-0-2)

#### **NUTRI 576, 577**

*Interrelationships of Nutrition and Disease I, II.* In this survey of nutritional pathophysiology, the student will describe the etiology, screening, diagnostics and treatment of diseases as they related to nutrition and diet therapy. The content will be organized by body systems including disorders of the endocrine, cardiovascular, renal, and gastrointestinal systems, among others. (3-0-3, 3-0-3)



**NUTRI 581**

*Techniques for Nutritional Research.* The lecture portion of this course presents sufficient basic information to enable the student to perform proximate analysis of food samples during laboratory periods. Students will also purify a crude enzyme preparation by using elementary purification methods demonstrated during lecture. (1-1-2)

**NUTRI 585, 586**

*Research Problem.* Under the supervision of a faculty member, the student will conduct a modest research project in clinical dietetics or nutrition and prepare a written research report which includes the following components: (1) statement of the problem, (2) review of the literature, (3) research design—procedures, (4) findings, (5) discussion and conclusions. The student is encouraged to complete the study designed in HLCED 583 and 584, or some modification of it. The proposed project must be submitted in writing to the Director of the Section of Clinical Nutrition by the third week of the quarter preceding the quarter in which the student intends to register for this course. Prerequisites: HLCED 583 and 584. (v-0-3, v-0-8)

**NUTRI 591**

*Independent Clinical Study.* Student will either participate in an ongoing study as an investigator or carry out a modification of the

study designed in HLCED 584. The project must be approved by the advisor and preceptor six weeks before the beginning of the quarter in which the study is to be conducted. Prerequisite: HLCED 584. Permission of instructor. (0-0-v)

**NUTRI 595**

*Special Project in Nutrition.* In consultation with a faculty member, the student will complete a special project of a non-experimental research nature. Examples of acceptable projects include the conduct and written report of a survey involving a current issue in nutrition, the development of a learning module for patient education or the design of a community health program with a nutrition focus. The project must be approved by the advisor and the preceptor six weeks before the beginning of the quarter in which the project is to be conducted. Permission of the instructor. (0-0-3)

**NUTRI 599**

*Independent Reading.* Student undertakes directed readings and discussions with preceptor on a selected topic in nutrition to complement his/her learning goals. It is expected that the student will write a substantive review of the topic after completing the readings. Students must contact preceptor before registering. Permission of instructor. (0-0-v)

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**Occupational Therapy****OCC 501**

*Sensory Integration Assessment.* Mechanics, administration, and interpretation of the Southern California Sensory Integrative Tests (SCSIT) leading to certification by the Center for the Study of Sensory Integrative Dysfunction. Prerequisite: Introductory Statistics. (3-v-3)

**OCC 502, 503, 504**

*Sensory Integration: Theory and Application I, II, III.* Basic and advanced theories and propositions of sensory integration and neuro-developmental treatment as presented by major theorists; application of theories to diverse treatment settings and populations.

Prerequisite: OCC 501; OCC 502, 503, 504 must be taken in sequence. (3-v-3, 3-v-3, 3-v-3)

**OCC 511, 512, 513, 514**

*Occupational Therapy Practicum.* Supervised field experiences in the exploration and application of sensory integrative techniques with varied developmental and diagnostic populations. Corequisites: OCC 501, 502, 503, 504 respectively. (v-v-2 or 3)

**OCC 521**

*Occupational Therapy Theory I.* Social-cultural-anthropological meaning of activity and its impact on the neuro-development of man. The course will compare and contrast major theories which have contributed to the

development of occupational therapy with emphasis on how sensory integrative theories have contributed to the knowledge base of occupational therapy. (2-0-2)

**OCC 522**

*Occupational Therapy Theory II.* A continuation of OCC 521 Occupational Therapy Theory I. Prerequisite: OCC 521. (2-0-2)

**OCC 531**

*Education Seminar.* Overview of mechanics, principles and strategies of clinical and classroom instruction. The primary purpose of the course is to provide an introduction to the educational process through discussion and experiential methods. (2-v-2)

**OCC 541**

*Related Assessment and Evaluation.* Survey

of instruments which can be utilized to determine level and type of neuro-developmental function/dysfunction. The course will explore already developed standardized and non-standardized instruments as well as an exploration of the need for additional assessment tools in occupational therapy. Prerequisite: NEU 501 and OCC 501. (3-v-3)

**OCC 581**

*Research Implementation.* Independent work towards implementation of research project designed in HLCED 583 and 584, under the supervision of faculty advisor. Prerequisite: HLCED 583 and 584. (v-0-3)

**OCC 599**

*Independent Study.* Creative project designed by student and supervised by faculty. (v-0-3)

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**Pathophysiology**

**PPHYS 552, 553**

*Nutritional Pathophysiology I, II.* The study of the pathophysiology and medical management of disorders related to nutrition and the

nutritional status of human beings. Prerequisite PHYSO 551 or permission of instructor. (3-0-3, 3-0-3)

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**Physiology**

**PHYSO 551**

*Nutritional Physiology.* The student will develop an understanding of those aspects of advanced physiology most related to nutrition by describing the role of nutrition in the growth and reproduction of the cell and of the total human organism; by explaining the transport process in terms of the cell mem-

brane, absorption, excretion and the mechanics of the processes involved; by describing the functional aspects of integrative systems (nervous, endocrine) as they relate to the integration of nutrient metabolism; and by explaining the function of stores and reserves which result when intake exceeds need. (3-0-3)

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**Religion and Health**

**RELH 453**

*Illness and Faith.* Course examines the patients' understanding of body, time, shame, community, the self, sacrifice and suffering, religious resources, and the relationship between God and illness in the light of their faith. Employs seminar method and some clinical materials. Please consult faculty before enrolling. (2-0-2)

**RELH 461**

*Living and Dying Seminar I.* An examination of the fears and feelings elicited by the clinical experience of contact with the dying patient, and of the fears and feelings of the critically ill

patient and how to deal realistically with these fears in a clinical setting. Includes supervised patient contact. Permission of instructor. (1-3-2)

**RELH 462**

*Living and Dying Seminar II.* Continuation of RELH 461. Individual conferences with advanced students on problems raised in their clinical experiences. (1-3-2)

**RELH 501**

*The Art of Healing.* An 11-week intensive clinical course focusing on the interpersonal dimensions of the healing process; apprecia-



tion of the patient as a total being; exploration of the anxieties and inhibitions generated in relating to the sick; specialized communication skills; and perception of the patient as a partner in the healing task. The course also assists the student to discover and use his/her own uniqueness in relating therapeutically to the sick.

*Note:* Students may be accepted for this course from any discipline or field of study. The descriptions of seminars that follow are built upon the experience of teaching the course for theological students. However, no difficulty is inherent in incorporating non-theological students into the course.

*Prerequisite:* For theological students at least one year of graduate theological education and an interview with one of the faculty of the Department of Religion and Health. For non-theological students an interview with one of the faculty of the Department of Religion and Health. (9-25-v)

#### **RELH 611**

*Clinical Case Conference.* This clinical seminar uses verbatim written materials or tape recordings of actual patient visits by students. One student presents material each seminar period; all students present in a sequence which they construct. Verbatim materials are circulated to seminar members in advance of the seminar to allow careful preliminary study.

The supervisor and the seminar members engage the presenting student in an examination of his ministry. Together they explore the student's understanding of the patient's communication, the student's assessment of the patient's pastoral needs, the student's attempt to carry out an appropriate ministry, the student's ability to use his/her own faith meaningfully in his/her ministry, and the meaning of the student's subjective response to patients. *Prerequisite:* RELH 501. (3-25-v)

#### **RELH 615**

*Sermon Preparation and Delivery.* Students prepare a sermon manuscript and give the sermon in the hospital chapel with their seminar group as the audience. Seminar then relocates and the preaching experience is examined in terms of its appropriateness to the

hospital congregation, its articulation of the faith, its witness to the faith and development of the student, and its effectiveness as interpersonal communication. Usually these sermons are amended and given during a Sunday worship service in the hospital chapel. *Prerequisite:* RELH 501. (1-1-v)

#### **RELH 621**

*Personal and Professional Concerns.* This seminar gives students the opportunity to report spontaneously on critical events and issues in their hospital ministry; to examine issues of personal or professional identity; to examine problems in communicating or functioning within the seminar group; to explore the meaning and context of their ministry, their relations with other medical center disciplines, their ability to think theologically about their experience; to examine individual problems of functioning effectively in the pastoral role; and to assist students in evaluating their progress in training. *Prerequisite:* RELH 501. (1-1-v)

#### **RELH 623**

*Didactic Presentations.* Presentations are made by professionals in other disciplines, by supervisory staff and by students themselves in an attempt to bring theoretical material to bear on the practical work of ministry and to assist the student in clarifying his/her operational concepts. *Prerequisite:* RELH 501. (1-1-v)

From time to time the didactic presentations are more structured to cover various important topics. Some subjects that have been presented in the past or that will be covered in coming quarters include:

*Suffering: Its Importance for Health.* This seminar explores the various philosophical and theological responses to suffering and their expression among hospital patients. The implications of the different responses to suffering for healing are explored.

*Aging, Faith, and Health.* A brief survey of the important biological, psychological and social changes that accompany aging sets the background for an exploration of the role of faith in the life of older persons, and particularly in their adjusting to and coping with illness.

*Faith as a Factor in Health.* A brief survey of the major theories of disease and health, scientific and unscientific, Western and non-Western, forms the background for a review of the literature on the role of faith, trust and hope in recovery from illness. Case examples from student experience are also reviewed. Prerequisite: RELH 501. (2-0-v)

#### **RELH 650**

*Individual Supervision.* Supervisor and student together develop an individualized contract for learning. The student is enlisted as a partner in the learning process by helping him/her identify goals, plan for learning, and evaluate progress. Written records of pastoral work are examined in detail as well as written and oral attempts of the student to understand and incorporate the values from the total program experience and to synthesize the clinical, theological, and theoretical data encountered. Supervision of the student on the floor while seeing patients is also provided. Prerequisite: RELH 501. (v-v-v)

#### **RELH 681**

*Guided Study or Research.* Each student is expected to undertake a reading or research program that is complementary to his/her learning goals and/or remedial in terms of gaps in basic preparation for understanding pastoral care. Supervisor is consultant to the student for the study program. Note: Expected of year-long students only. Prerequisite: RELH 501. (v-v-v)

#### **RELH 685**

*Clinical Practice.* Each student has a design-

nated area of pastoral responsibility, usually 40 to 50 beds. Student is assisted to develop working relationships with the treatment team and to develop a style of coverage appropriate to the area.

Each student serves once per week as on-call chaplain for overnight or weekend coverage and/or does an evening of visiting with preoperative patients. These special duties involve the student of ministry in situations of crisis or heightened anxiety.

Clinical practice requires special arrangements for non-theological students. Prerequisite: RELH 501. (v-25-v)

#### **RELH 689**

*Comprehensive Evaluations.* Each student prepares a written evaluation of himself/herself and the total program experience. This evaluation is shared with the supervisor and fellow students and examined with the student in seminar and individually. The evaluation periods assist the student to examine his/her investment in learning, goals, use of program resources, relationships, and progress toward learning goals. The supervisor prepares a detailed written evaluation of the student at the end of the program that is usually shared with the student. The comprehensive evaluations are necessary for determining satisfactory completion of the course and credit where appropriate.

The course may not be taken more than twice for academic or field work credit. Prerequisite: RELH 501. (v-0-v)

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### **Speech and Hearing Sciences**

#### **SHS 501**

*Speech and Hearing Science.* Various aspects of physiologic and acoustic phonetics are examined as well as the relationship between production and perception. Introductory psychoacoustics, instrumentation, experimental and applied research in speech and hearing science is critically examined. (3-2-3)

#### **SHS 505**

*Audiology I.* Basic audiological methods, pure tone audiometry, masking, speech audiometry, and tolerance testing. (3-0-3)

#### **SHS 506**

*Audiology II.* Special behavioral methods designed to provide differential diagnosis of auditory pathology. (3-0-3)



**SHS 511, 512, 513, 514, 515**

*Speech-Language Pathology Practicum I, II, III, IV, V.* Supervised clinical experience with patients presenting speech, language, voice, fluency or swallowing impairments. Development of evaluative, therapeutic, counseling and report writing skills. The relationship of speech-language pathology to other health care professions is examined. (v-v-v)

**SHS 516, 517, 518, 519, 520**

*Audiology Practicum I, II, III, IV, V.* Supervised clinical experience with patients displaying various hearing impairments. Development of skills in diagnostic evaluation, obtaining case histories, counseling and treatment techniques for pediatric through geriatric patients. The relationship of audiology to other health care professions is examined. (v-v-v)

**SHS 521**

*Childhood Language I.* Language acquisition. Examines relationships among structure and use of language; cognition, environmental stimulation, ethnic and social status factors. Course considers language acquisition from theoretical, neural-organic, and descriptive perspectives. (3-0-3)

**SHS 522**

*Childhood Language II.* Language disorders in children. Emphasis on the nature of language delay or breakdown associated with known or unknown etiologic factors. Consideration of sensory-motor processing disturbance in language-disordered children. Assessment and therapeutic techniques are studied. (3-0-3)

**SHS 524**

*Fluency, Dysfluency and Stuttering.* Developmental fluency factors are examined with emphasis on differentiation of normal dysfluency from deviant patterns. Theories of causation are related to management of stut-

tering. Evaluation and therapeutic procedures are examined in conjunction with clinical observation. (3-0-3)

**SHS 526**

*Industrial Audiology.* Requirements, evaluation techniques for hearing conservation programs in industry and the community. (3-0-3)

**SHS 527**

*Total Communication.* Theories and practical knowledge of oral and manual communication systems for the deaf and hard of hearing. (3-0-3)

**SHS 531**

*Amplification for the Hearing Impaired.* Examines the history of hearing aids, techniques for selection of hearing aids, electroacoustic analysis with microprocessors and manikins, government regulations, and delivery systems. (3-0-3)

**SHS 533**

*Aural Rehabilitation.* Analysis of techniques and principles of auditory and visual skills to be developed by the deaf and hard of hearing individual from childhood through geriatric. (3-0-3)

**SHS 540**

*Anatomy and Physiology of the Vocal Mechanism.* A study of anatomy and principles of physiology as they relate to the respiratory, phonatory and articulatory aspects of speech. Dissection and laryngeal pathology examined in lab. (3-1-4)

**SHS 541**

*Anatomy, Physiology, and Pathology of the Auditory System.* Study of the anatomy and basic principles of physiology as they relate to the auditory system. Diseases and injuries of the hearing mechanism are examined with focus on audiological findings. Lecture and selective observation with otolaryngologists complement classroom topics. (3-0-3)

**SHS 542**

*Electronystagmography.* Anatomy and physiology of the vestibular and ocular motor systems, disorders of patients presenting vertiginous symptoms, with emphasis on technique and interpretation of ENG. (2-1-3)

**SHS 543**

*Electrophysiologic Assessment of the Auditory System.* Reviews the principles of electrophysiologic testing. Analysis of electrodermal audiometry, heart rate audiometry, electrocochleography, brainstem evoked potentials, and cortical evoked potentials. (3-0-3)

**SHS 544**

*Child Audiology.* Investigation of neonatal and childhood auditory disorders; emphasis on various means of evaluation and treatment. (3-0-3)

**SHS 551**

*Diagnostic Methods in Speech-Language Pathology.* Examination of evaluative procedures and tests used with children and adults. History gathering and counseling techniques are studied. The student is provided experience in taking histories, test administration and interpretation and counseling. Medical and behavioral evaluative models are critically examined. (3-0-3)

**SHS 553**

*Instrumentation in Hearing and Speech Sciences.* A study of the electro-acoustical and mechanical principles of instrumentation utilized in the clinical and scientific aspects of audiology and speech-language pathology. Instrumentation is applied in lab. (3-1-4)

**SHS 561**

*Articulation Disorders.* Review of phonemic development, classification of articulation impairment, etiologic and theoretic considerations. Contemporary basic and applied research is examined. Evaluative procedures, tests and therapeutic procedures are emphasized. Clinical observation and limited involvement in evaluations are provided. (3-1-4)

**SHS 562**

*Communicative Disorders Associated With Cranio-facial Anomalies.* In addition to cleft palate and cleft lip, various craniofacial anomalies and associated communicative impairments are studied. Assessment and treatment procedures are presented and supplemented with observation. A segment of the course concerns management of speech and swallowing in head and/or neck cancer patients. Lecture and selective observation with otolaryngologists and pediatricians complement classroom topics. (3-0-3)

**SHS 563**

*Voice Disorders.* Symptomology, etiology, diagnosis and treatment of voice disorders is presented. Vocal characteristics, assessment and management of various vocal pathologies are emphasized. Application of spectrographic analysis and EMG biofeedback to hyperfunctional vocal conditions. A segment of the course concerns management of speech and swallowing in head and/or neck cancer patients. Lecture, demonstration and selective observation with otolaryngologists complement classroom topics. (3-0-3)

**SHS 564**

*Aphasia and Other Symbolic Disorders.* Course provides historical perspectives. Neurolinguistic disorders are examined from connectionistic and holistic points of view with consideration of contemporary clinical research. Normal process and impairment of swallowing reviewed. Emphasis on clinical assessment, test batteries, and treatment with observational experiences. Lectures, selective observation with neurologists, neurosurgeons and neuropsychologists complement speech-language topics. (3-0-3)

**SHS 565**

*Motor Speech Disorders.* Dysarthria associated with central and peripheral nervous system dysfunction is examined from neurophysiological, theoretical and clinical perspectives. Assessment and treatment procedures are emphasized. A segment of the course concerns management of communica-



tive disorders in cerebral palsied individuals with experience at external sites. Lectures, selective observation with neurologists, neurosurgeons and neuropsychologists complement speech topics. (3-0-3)

#### **SHS 566**

*Pediatric Neurologic Disorders.* Assessment and management of communicative disorders associated with neurologic impairments in children. Focus on cerebral palsy, mental retardation, and developmental disabilities in the 0 to 3 population. Interdisciplinary models for provision of services are studied. (3-0-3)

#### **SHS 572**

*Psychoacoustics.* Advanced psychoacoustics. Examination of the psycho-physical properties of auditory stimuli beyond content presentation in SHS 501. Instrumentation relevant to psychoacoustics research is applied in lab. Prerequisite SHS 501. (3-1-4)

#### **SHS 575**

*Issues in Counseling.* Medical, psychological and sociologic issues in counseling patients and/or family members of patients with communicative disorders are examined. Practical counseling experience as well as the study of counseling models is provided. (3-0-3)

#### **SHS 581**

*Introduction to Graduate Research.* Emphasis on today's library and information retrieval systems, critical analysis of research in behavioral science, hypothesis testing, methodology, descriptive and inferential statistics, form and style in dissemination of research. Focus on parametric and non-parametric statistical models most relevant to research problems in speech and hearing science. Introductory computer programming. (3-0-3)

#### **SHS 590**

*External Practicum in Speech-Language Pathology.* Supervised clinical experience at Rush Network Hospitals or cooperating institutions. (v-0-10)

#### **SHS 591**

*Advanced Clinical Training.* Advanced training in speech-language pathology or audiology. (v-v-v-)

#### **SHS 592**

*Seminar in Audiology.* Focuses on significant scientific issues in hearing science or audiology. Course work emphasizes development of a major paper or work product and oral presentations. (3-0-3)

#### **SHS 593**

*Seminar in Speech and Language Pathology.* Focuses on significant scientific issues in speech-language science or speech-language pathology. Course work emphasizes development of a major paper or work product and oral presentations. (3-0-3)

#### **SHS 595**

*External Practicum in Audiology.* Supervised clinical experience at Rush Network Hospitals or cooperating institutions. (v-0-10)

#### **SHS 598**

*Thesis.* Under the guidance and direction of a faculty member and committee, the student originates, proposes and executes an experiment. Theses answer significant clinical or basic research questions and reflect a high degree of scholarship in speech and/or hearing science. (v-0-3)

#### **SHS 599**

*Independent Study.* Creative project designed by student and supervised by faculty. (v-0-3)

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# Faculty

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# Faculty of College of Health Sciences

1981-1982

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The colleges of Rush University are located at the main campus of Rush-Presbyterian-St. Luke's Medical Center at 1753 West Congress Parkway, Chicago, Illinois 60612

**The College of Health Sciences**  
**The College of Nursing**  
**Rush Medical College**  
**The Graduate College**

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## **Affiliated Colleges**

Beloit College, Beloit, Wisconsin 53511  
Carleton College, Northfield, Minnesota 55057  
The Colorado College, Colorado Springs, Colorado 80903  
Cornell College, Mount Vernon, Iowa 52314  
Fisk University, Nashville, Tennessee 37203  
Grinnell College, Grinnell, Iowa 50112  
Illinois Institute of Technology, Chicago, Illinois 60616  
Knox College, Galesburg, Illinois 61401  
Lake Forest College, Lake Forest, Illinois 60045  
Lawrence University, Appleton, Wisconsin 54911  
Macalester College, St. Paul, Minnesota 55105  
Monmouth College, Monmouth, Illinois 61462  
North Central College, Naperville, Illinois 60540  
Ripon College, Ripon, Wisconsin 54971

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## **Clinical Network**

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Central DuPage Hospital, Winfield, Illinois  
Christ Hospital, Oak Lawn, Illinois  
Community Memorial General Hospital, La Grange, Illinois  
Copley Memorial Hospital, Aurora, Illinois  
Galesburg Cottage Hospital, Galesburg, Illinois  
Grant Hospital of Chicago, Chicago, Illinois  
Mile Square Health Center, Inc., Chicago, Illinois  
Mount Sinai Hospital Medical Center, Chicago, Illinois  
St. Mary's Hospital, Streator, Illinois  
Schwab Rehabilitation Hospital, Chicago, Illinois  
Skokie Valley Community Hospital  
Swedish Covenant Hospital, Chicago, Illinois  
West Suburban Hospital, Oak Park, Illinois

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**Rush University**  
**600 S. Paulina**  
**Chicago, Illinois 60612**  
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## Medical Center: A Summary

Rush-Presbyterian-St. Luke's Medical Center is the central initiating component of a comprehensive, cooperative health delivery system, serving some 1.5 million people through its own resources and in affiliation with 14 community hospitals and health care institutions in northern Illinois.

It is Rush University, and a cooperative educational system which comprises Rush Medical College, the College of Nursing, the College of Health Sciences, The Graduate College and 14 liberal arts colleges and universities in six states from Colorado to Tennessee.

It is Presbyterian-St. Luke's Hospital, a major referral center providing primary care to its immediate community, and secondary and tertiary care to patients from across the country.

It is Sheridan Road Hospital, a 139-bed community hospital serving Chicago's north side, and the 175-bed Johnston R. Bowman Health Center for the Elderly, a short-term rehabilitative facility which serves as a national model for hospital-based geriatric care.

It is a center for basic and clinical research in both traditional disciplines and multidisciplinary centers, coordinating the attack on cancer, cardiovascular disease, and multiple sclerosis.

It is a pioneer in community medicine through its relationship with Mile Square Health Center, the creation of its own Health Maintenance Organization, ANCHOR, and its expanding services in the city and beyond.

In all, Rush-Presbyterian-St. Luke's is an organization of over 8,000 people—medical and scientific staff, faculty, students, and

employees—committed to providing the best care with the highest professional standards, and with compassionate attention to the needs of every patient.

### Approvals

Joint Commission on Accreditation of Hospitals

Liaison Committee for Graduate Medical Education

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American Medical Association for Residencies for Physicians

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Chicago Hospital Council

American Association of Colleges of Nursing

Blue Cross/Blue Shield Health Care Service Corporation

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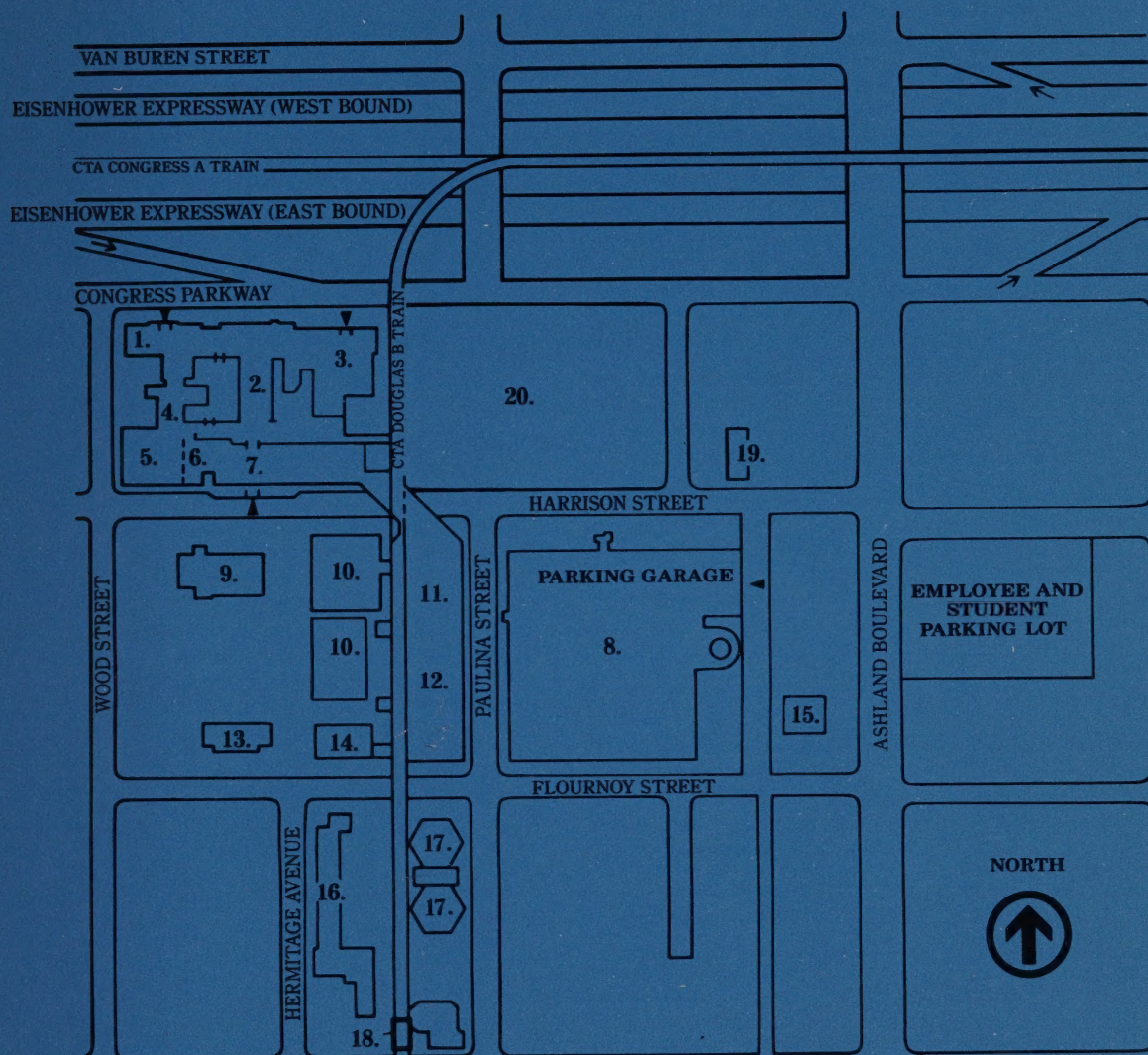


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**Rush-Presbyterian-St. Luke's  
Medical Center  
Rush University Campus**



- |                              |   |
|------------------------------|---|
| 1. Jones                     | 12. Cafeteria   |
| 2. Pavilion                  | 13. Kidston Apartments                                  |
| 3. Kellogg Pavilion          | 14. McCormick Apartments                                |
| 4. Murdock                   | 15. Laurance Armour Day School                          |
| 5. Rawson                    | 16. Marshall Field IV Mental Health Center              |
| 6. Senn                      | 17. Johnston R. Bowman Health<br>Center for the Elderly |
| 7. Jelke Southcenter         | 18. Polk Street Station, CTA                            |
| 8. Parking Garage            | 19. Warehouse   |
| 9. Schweppe-Sprague Building | 20. New Patient Care Wing<br>(under Construction)       |
| 10. Professional Buildings   |   |
| 11. Academic Facility        |   |



